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Instruction Memorandum No. 90- 439
Expires 9/30/91

To: All WO and Field Officials

From: Director

Subject: Transmittal of Master Plan for Automation DD: 5/18/90

The purpose of this Instruction Memorandum is to transmit, under separate cover, the Bureau of Land Management's (BLM's) Master Plan for Automation which was developed to provide a baseline for approved automation activities critical to meet mission objectives. The plan consists of a General Overview, which defines the basic objectives and strategies for automation and a Tactical Plan for implementing those objectives. The Tactical Plan includes project plans for five major areas - Data Management, Technology Management, People and Organization Management, Target System Acquisition Management and New Program Initiatives.

Also attached is guidance, in a question and answer format, on the purpose, use and updating of the Master Plan. This is intended to address some of the questions and concerns regarding the Master Plan that have been raised and to clarify its intent. This understanding is essential for those personnel involved in the preparation of items which are to be developed in conformance with the Master Plan such as budget requests, and state specific Information Resources Management Plans (IRMP).

The Master Plan is to serve as the primary management tool for guiding all the BLM's automation efforts and field involvement. In order that your specific concerns be addressed, each State Office is to designate an Automation Planning Manager. The responsibility of these managers is to develop the State IRMP's and to channel all State feedback on the Master Plan to the Washington Office Manager. Furthermore, each Associate State Director should assume an active role in "sponsoring" the Master Plan and ensuring that all State sponsored automation efforts conform with it. Similarly, the Washington Office Assistant Directors are to also assume a sponsorship role to ensure that their respective automation efforts are in conformance with the Master Plan.

The State Automation Planning Managers should begin reviewing the Master Plan at least from the perspective of using its format as a guide in the development of their respective IRMP's. They are to feed these comments, along with any others, to their Associate State Directors so they may be prepared to discuss them at the next Field Committee meeting scheduled for May 14-17, 1990. These comments can then serve as State input to be incorporated into the next Version of the Master Plan.

Rob Cervantes, WO-704, has been designated the Master Plan Manager at the Washington Office. Please notify him of your selections for State Office Automation Planning Managers by May 18, 1990. Furthermore, all modifications, updates or other submissions to the Master Plan are to be directed to him for coordination and review among the appropriate personnel. If you have any questions on this, please call him at FTS 653-6105.

Dean Stepanek

Dean Stepanek
Deputy Director

2 Attachments
- 1 - Master Plan Guidance (3 pp)
- 2 - Master Plan Structure and Process (1 p)

MASTER PLAN GUIDANCE

1. Q. What is the Master Plan?
   A. The Master Plan is a project plan, or "blueprint" for managing the multitude of Bureau automation efforts, both planned and currently underway. Its intent is to clearly portray the content and purpose of individual tasks, along with their associated risks, assumptions, and underlying policies. An equally important purpose of the Master Plan is to coordinate these separate efforts especially when tasks are dependent, e.g. when one effort cannot begin until another is completed.

2. Q. Does the Master Plan convey official policy?
   A. Yes. The Master Plan, as part of an Instruction Memorandum, does convey Bureauwide policy. This policy is the basis for and is reflected in the tasks and related activities. Field Managers can use these policies and tasks in developing priorities and establishing PIPR items

3. Q. Who should review the Master Plan?
   A. All personnel are encouraged to read the General Overview of the Master Plan. However, it is essential that those staff members responsible for specific automation activities review at lease those portions of the Tactical Plan that affect their activities.

4. Q. How do we use the Master Plan, that is, how do we know where to find specific policies and/or information?
   A. As shown on the enclosed chart entitled "Master Plan Organization" the Master Plan consists of a General Overview, and Tactical Plan. Information regarding the Bureau's overall goals and policies for automation can be found in the General Overview. For specific information, you go to the appropriate Category in the Tactical Plan which is further broken down into: Activity, Task, and Action Steps. So, for example, if you wanted information on data standards for the solids minerals program you would: (1) first go to the category - Data Management, and examine the Table of Contents, (2) next go to the activity - Existing and proposed Data Standards, (3) then go to the task - Mineral Solids and Saleable Data Standards Case Recordation/ORCA, and (4) finally to the specific action steps in the table entitled "Mineral Solids and Saleable Data Standards".

   The next Version of the Master Plan will place action steps directly with each task (the word processing software used in this Version made this too difficult to do and still meet the completion date). Guidance on preparing State Information Resource Management Plans will also be included in the next Version.

5. Q. How do we know who to contact for more information?
   A The chart entitled "Master Plan Organization" also identifies the key managers for various components of the Master Plan. For specific information, each of the Tasks has an identified "Task Manager" that is responsible for its content as well as responding to inquiries (for

the example in question number four, you would contact J. Horan WO-640). Action steps within each task also have accountable managers identified and they can provide more detailed information. If the identified task manager is no longer available, e.g. job transfer, then their previous organization lead has the responsibility until a new task manager is identified.

6. Q. How will changes to the Master Plan be handled?

   A. Any proposed changes to the Master Plan will be initially submitted to the Washington Office Master Plan Manager, Rob Cervantes (WO-704), where they will be "logged in" and forwarded to the appropriate personnel for review and comment, (including the "Leads" as described below). They will be tracked by the Washington Office Master Plan Manager who will also keep the originator(s) of the proposed changes apprised of their progress. Proposed changes from State/Field Offices must come through the designated State Office Automation Planning Managers who will then forward them, through the State Directors, to the Washington Office Master Plan Manager.

   Washington Office "Category Leads" have been established for each of the five major categories. These leads will be responsible for managing changes to their respective chapters and ensuring coordination for task dependencies across organizational/chapter lines.

   Management decisions to change the plan will be made regularly after staff work is completed. Decisions that will require budget modifications will be made only after a review of costs and alternatives to the proposal. Revised guidance for budget priorities will be issued where needed in order to ensure consistency between automation planning and budgets.

7. Q. How often will the Master Plan be issued?

   A. New versions of the Master Plan will be issued on a quarterly basis. The estimated release for the next Version is the first week of July, 1990. Between quarterly releases, significant Master Plan accomplishments will be communicated informally through the Friday Facts Sheets published by WO-704 and formally through Instruction Memoranda and Information Bulletins.

8. Q. How will the Master Plan be presented/explained to Bureau field personnel?

   A. The "Automation for Managers" course will continue to be used to brief the field on the Master Plan. Additionally, starting in FY91, this course will be augmented by an "Automation Core Module" which is being developed by and offered at the Phoenix Training Center. This "Module" will be the mechanism by which the field is briefed on Master Plan items including: the reasons for automation, the status of previous efforts and current activities, and the schedules for implementing different automated capabilities.

9. Q. Where and how is the budget tied in the Master Plan?

A Specific budget items will be included in the task action plans under the "People-Resources" heading. Only those IRM tasks which are identified in the Master Plan will be eligible for funding. As such, budget documents such as Annual Work Plans, are to be done in conformance with the Master Plan.

10. Q. How will the Field Committee, and the Information Resource Management Advisory Committee be used once the Master Plan is developed?

A. The Field Committee will continue to serve an advisory role on automation issues from a managerial perspective. Their responsibilities include ensuring the Master Plan policies, and priorities are understood and followed in the field offices, and that proposals from field offices to change the policies, and priorities are addressed by the Washington Office. The IRMAC will review automation issues and provide technical advice and recommendations.

11. Q. Where are timelines and/or PERT charts for the Master Plan?

A. Timelines and PERT charts showing the linkages between tasks over time will be included in the July Version.

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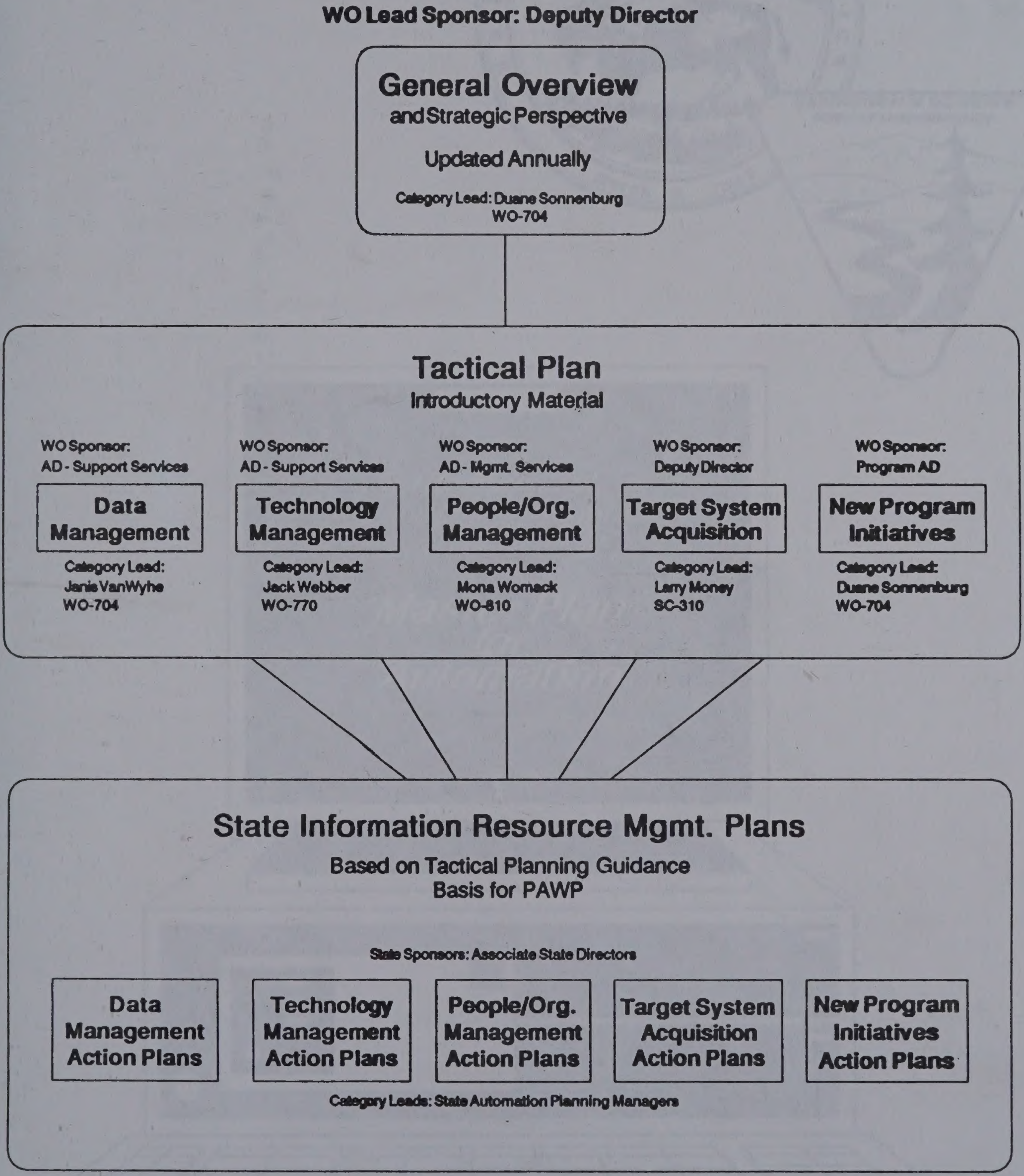
Master Plan Structure and Process



WO Lead Sponsor: Deputy Director

General Overview
and Strategic Perspective

Updated Annually

Category Lead: Duane Sonnenburg
WO-704

Tactical Plan
Introductory Material

WO Sponsor:
AD - Support Services

Data Management

Category Lead:
Janis VanWyhe
WO-704

WO Sponsor:
AD - Support Services

Technology Management

Category Lead:
Jack Webber
WO-770

WO Sponsor:
AD - Mgmt. Services

People/Org. Management

Category Lead:
Mona Womack
WO-810

WO Sponsor:
Deputy Director

Target System Acquisition

Category Lead:
Larry Money
SC-310

WO Sponsor:
Program AD

New Program Initiatives

Category Lead:
Duane Sonnenburg
WO-704

State Information Resource Mgmt. Plans
Based on Tactical Planning Guidance
Basis for PAWP

State Sponsors: Associate State Directors

Data Management Action Plans

Technology Management Action Plans

People/Org. Management Action Plans

Target System Acquisition Action Plans

New Program Initiatives Action Plans

Category Leads: State Automation Planning Managers

March 3, 1849

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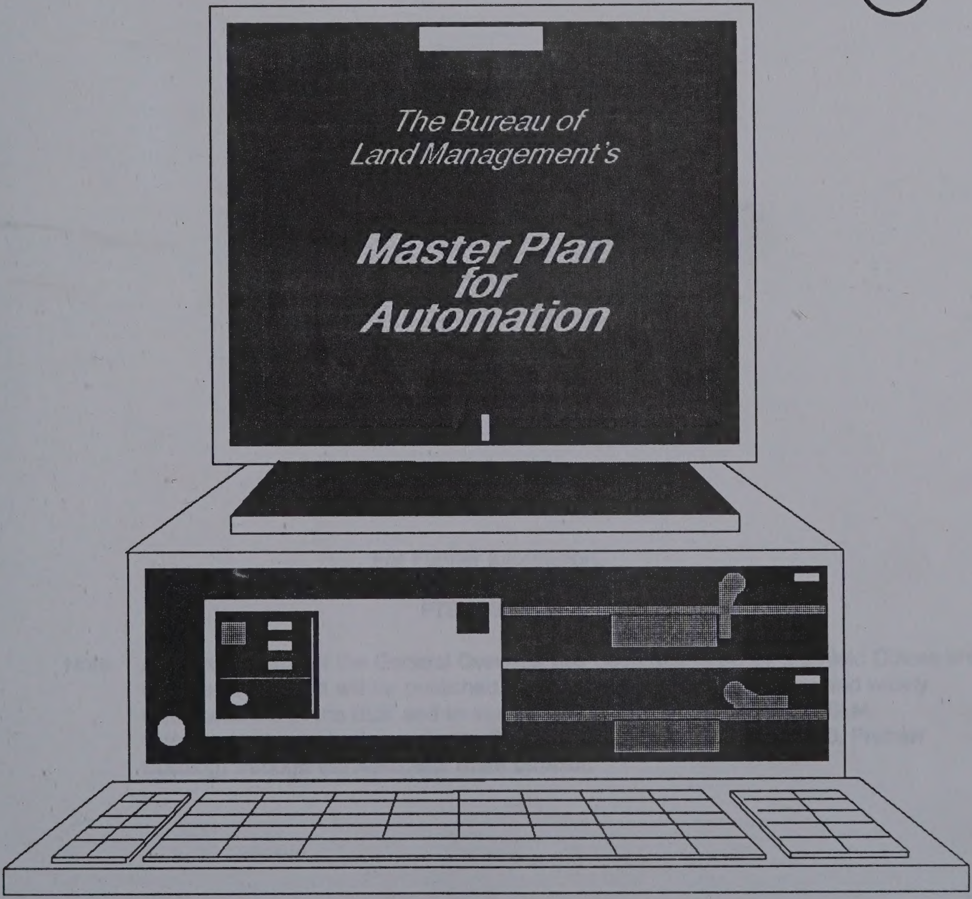
BUREAU OF LAND MANAGEMENT



The Bureau of
Land Management's

Master Plan for Automation

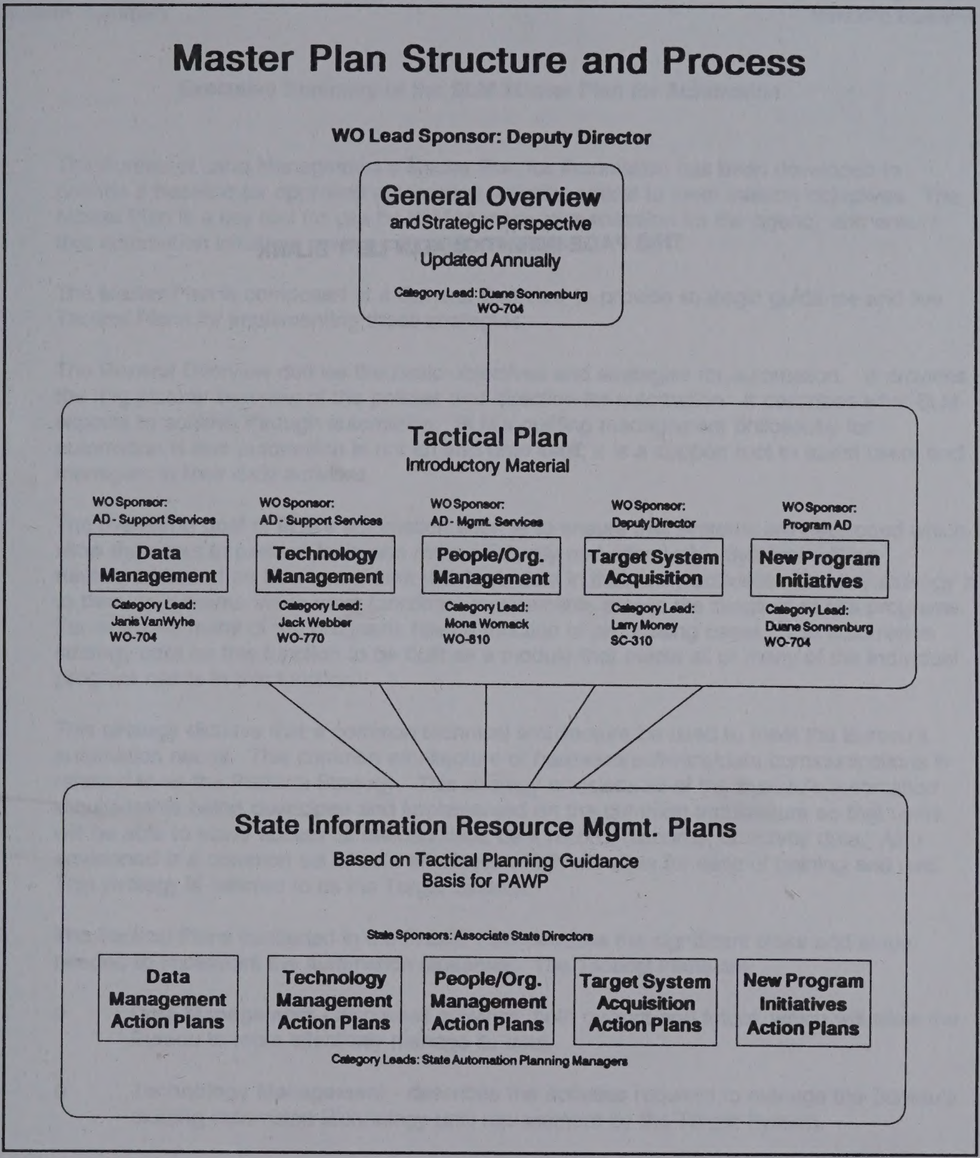
The Bureau of Land Management

Master Plan for Automation

General Overview

For Further Information,
contact the Assistant Director of Support Services
FTS 343-3897

Note: After this version of the General Overview has been examined by the Field Offices and comments made, it will be published as an official Bureau publication and widely distributed within the BLM and to interested organizations outside the BLM. Comments should be forwarded to Rob Cervantes (WO-704, Room 603, Premier Building) through the Associate State Director.


Master Plan Structure and Process
WO Lead Sponsor: Deputy Director
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State Sponsors: Associate State Directors
Data Management Action Plans
Technology Management Action Plans
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Target System Acquisition Action Plans
New Program Initiatives Action Plans
Category Leads: State Automation Planning Managers

Figure 1. Master Plan Organization

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Executive Summary of the BLM Master Plan for Automation

The Bureau of Land Management's Master Plan for Automation has been developed to provide a baseline for approved automation activities critical to meet mission objectives. The Master Plan is a key tool for use by BLM to manage automation for the agency and ensure that automation initiatives meet a critical Bureau need.

The Master Plan is composed of a General Overview to provide strategic guidance and five Tactical Plans for implementing those strategies.

The General Overview defines the basic objectives and strategies for automation. It provides the "big picture" overview of the policies and direction for automation. It describes what BLM expects to achieve through automation. BLM's guiding management philosophy for automation is that automation is not an end unto itself; it is a support tool to assist users and managers in their daily activities.

The overriding goal of BLM's automation effort is to ensure that systems are developed which allow the users to perform their jobs more efficiently and effectively. Systems will be developed based on how users work with their data in their daily activities. The key strategy is to develop systems which meet functional requirements across the range of BLM's programs. For example, many of the programs have a function of processing cases. The automation strategy calls for this function to be built as a module that meets all or many of the individual program needs in this function.

This strategy dictates that a common technical architecture be used to meet the Bureau's automation needs. This common architecture of hardware/software/data communications is referred to as the Platform Strategy. This strategy envisions all of the Bureau's automation requirements being developed and implemented on the common architecture so that users will be able to easily access all needed data, be it record, resource, or survey data. Also envisioned is a common set of user interfaces which will allow for ease of training and use. This strategy is referred to as the Target System.

The Tactical Plans contained in the Master Plan describe the significant tasks and steps needed to implement the automation strategies. The Tactical Plans are:

- **Data Management** - discusses activities, both current and future, which will allow the Bureau to more effectively manage its data.
- **Technology Management** - describes the activities required to manage the Bureau's existing automated technology until replacement by the Target System.
- **People and Organization** - defines activities and tasks needed to prepare the Bureau's people, organization, and culture for automation.
- **Target System** - describes activities necessary to procure, develop, and implement the Target System.
- **New Program Initiatives** - identifies the new proposed automation initiatives that will impact either the Interim Period or the Target System.

The Master Plan is intended to be used as a document which identifies and tracks changes in the automation efforts in BLM. It is meant to be dynamic and reflect changing program priorities and strategies. The Master Plan will also be used to prioritize and approve automation efforts. This plan will be used to build budget justifications, allocate funds, and monitor program progress. All offices involved in automation activities will be required to develop Information Resources Management Plans (IRMP) which define projected or ongoing automation activities in their offices. These plans will be used to prioritize program funding for individual projects. The IRMPs will be expected to follow the format of the Master Plan as closely as possible to allow for clear tracking of projects.

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Figure 1. Master Plan Organization i

1 Introduction

1.1 Mission

The Bureau of Land Management is responsible for the balanced management of the public lands and their various values so that they are considered in a combination that will best serve the needs of the American people. Management is based upon the principles of multiple use and sustained yield -- a combination of uses that takes into account the long-term needs of future generations for renewable and non-renewable resources. These resources include recreation, range, timber, minerals, watersheds, fish and wildlife, wilderness, and natural, scenic, scientific and cultural values.

BLM manages approximately 270 million acres of public lands-- about one- eighth of the land in the United States-- and the mineral estate underlying another 300 million acres of lands administered by other government agencies or owned by private interests. BLM's mandate for multiple use gives it responsibilities ranging from preservation of wilderness areas and wild horse herds to maximum feasible development of areas with mineral potential. Combined with its responsibilities in fire protection, surveying, and land records management, BLM truly serves the needs of the nation. BLM supports and encourages a land ethic of wise use and conservation of our land and its resources for current generations and a passing on of those lands to future generations in an improved condition.

1.2 Purpose of Automation

Management of the information assets about land parcels is critical to making decisions about how to best use America's natural bounty, balancing economic and environmental concerns in land use decisions and preserving options for the future. Our vision is to have land information based upon legal land parcels available for managers, specialists, and the public in an organized, automated system that allows BLM and other users to access and use data in support of a sound multiple-use land ethic.

The Bureau is pursuing a comprehensive approach which reflects the way data is used and shared throughout the agency and across organizational lines. It is based on analyses of BLM's significant data and functional requirements -- particularly how the agency's data is used to make land use decisions and guide daily activities. The implementation of standard, modern ADP technology at all office levels will allow the use of land records and resources data, tied together by the Geographic Coordinate Data Base, in day-to-day operations.

2 Background

2.1 BLM Culture

Over the years, BLM has developed a culture, or set of values, that gives structure to the organization and provides a framework for everything it does. BLM management recognizes that automated capabilities developed in concert with an organization's culture will be implemented swiftly in contrast to systems that are inconsistent with it.

BLM's values include a belief in multiple-use management, a recognition of the importance of BLM people, emphasis on decentralized management, and the practice of involving the public in natural resource management decisions. BLM makes every effort to provide the best service possible to the public, uses teamwork in getting the job done, and takes pride in its work. The BLM culture focuses on "getting the job done," with actual field operations perceived as substantially more valuable than administrative duties in the office.

It should be no surprise, then, that most BLM personnel support automation plans when they see them leading to concrete, constructive tools to do day-to-day work. The fire, cadastral survey, oil and gas, and other BLM programs have made use of technology as they found commercial capabilities or developed systems to meet their recognized needs. Long-range automation planning, on the other hand, has suffered because of an absence of recognized benefits. As automation planning actually facilitates faster system implementation and delivers products to employees, the perspective will change.

2.2 Historical Overview

BLM traces its origins back to the earliest days of the country. The nation's public domain was created by Congress when states claiming western territories ceded these lands to the federal government. Important among actions creating the public domain was The Land Ordinance Act of 1785, which established a policy of orderly settlement and the initiation of the rectangular land survey system now known as the Public Land Survey System.

Throughout the early and mid 1800's the United States expanded westward by acquiring lands through treaties and purchases, culminating with the Alaska purchase in 1867. The public domain then consisted of some 1.8 billion acres covering three-fourths of the continental United States and all of Alaska.

As this acquisition occurred, laws and agencies were established to assist in settlement and use of the land. The General Land Office (GLO) was established in 1812 to oversee the first organized system of public land management, including the administration, recording, and transfer of public lands.

During the late 1900's, the homestead laws, land bounties for military service, and railroad grants encouraged the westward growth of the country. Thousands of other land laws relating to disposal, leasing, rights-of-way, and other authorizations were passed and form the historical basis for BLM's responsibility for lands and realty today.

Congress also enacted laws pertaining to mining on the public lands. Over the years, these laws promoting prospecting and development, leasing operations, and purchasing of minerals reflected the nation's evolving policies on the use of mineral resources contained in the public domain lands. These laws created three distinctions of mineral commodities - locatables, leasables, and salables - which are still a part of BLM's minerals management program.

Until 1934 there was virtually no management of public lands. Use occurred on a first-come first-served basis and was essentially unregulated. The first authority for management of these lands was the Taylor Grazing Act, which was passed by Congress in 1934. It provided for orderly disposition and management of the lands, established grazing districts to foster conservation of the range, and stabilized the use of the lands by livestock users. The Grazing Service was established to administer this new law while the GLO remained responsible for the land disposal acts and for the administration of lands not within grazing districts.

In 1946 Congress addressed the need for more coordinated management of public domain lands by combining the functions of the GLO and the Grazing Service into the BLM. Despite roots going back almost 140 years, this new agency lacked a clear mission. BLM labored from 1946 until 1964 under myriad public land laws without clear Congressional direction.

The Federal Land Policy and Management Act of 1976 (FLPMA) was the first definitive, comprehensive statement of national policy for BLM's public lands. FLPMA mandated that the lands be retained and managed unless it was in the public interest to dispose of them, emphasized the importance of the lands and their wide variety of resources to the country's well-being, and established that lands and resources were to be managed under the principles of multiple use and sustained yield.

2.3 Automation Background

BLM has 35 years experience in automation. Like other agencies, BLM has learned many lessons in the process -- including the need for data and technical standards, the importance of managing information as a corporate asset, and the necessity of steadily modernizing automated technology.

In the 1950's and 1960's, BLM focused on using automated technology for technical services and administrative applications, with borrowed equipment in most cases.

BLM's first automated data processing application was implemented in 1955 --which is early in the history of computer technology-- for processing timber cruise data in Oregon, using Bonneville Power Administration computers. In 1961, Bureau of Public Road computers were used for road designs.

In 1968, a large computer was installed in Anchorage to support cadastral surveys and to help design the trans-Alaska pipeline. At about the same time, BLM automated a consolidated financial accounting system in Denver.

Starting in 1974, BLM developed the Range Automated Management System (RMAS) to generate bills for grazing fees. This was BLM's first "resource management" application on a Bureauwide basis. In 1975, BLM set up its first automated land record system in Alaska to process native claims.

A major breakthrough occurred in early 1978 when a Honeywell mainframe computer was installed at BLM's Denver Service Center. This provided the capability BLM needed for Bureauwide communications and data storage for certain administrative functions.

By July 1978, the Bureau's centrally stored and processed mining claim recordation system was operating in all BLM states except Alaska. A public domain graphics system for resource data analysis and display (the Map Overlay and Statistical System or "MOSS" family, of software) had been implemented on Data General equipment.

In 1979, the Bureau installed Honeywell Level 6 minicomputers in its state offices. This was the first major step in bringing computers to the field.

The decade of the 1980's was a period of urgent system development to meet immediate needs, hardware upgrades as new technology became commercially available, and overlapping studies of planned BLM systems. The upgrading of state office Level 6 systems in 1983 was a significant step that increased programming, storage, and speed capabilities. A similar upgrade of the Honeywell mainframe in 1986 improved the centralized processing of administrative functions and increased storage of resource data.

At the start of the 1980's BLM began to implement office automation on a large scale. Microcomputers quickly became common in BLM's nearly 150 field offices; by 1989 BLM had purchased nearly 4,500 microcomputers, or nearly one for every two employees.

In 1982, during a peak in oil and gas leasing activity when BLM had difficulty tracking applications, the Bureau developed the Case Recordation system to run on the Honeywell mainframe. Case Recordation, while needed, was inadequate to meet the need for case processing, report generation, and response to public queries. After considering the use of existing systems to automate land and mineral record operations, BLM proposed the development of the Automated Land and Mineral Record System (ALMRS) in 1984.

In 1988, BLM expanded the scope of ALMRS to include a comprehensive view of automation needs for the Bureau. BLM had conducted several analyses of its automation needs and determined that its functions and data were highly coupled and needed to be linked together for effective management use. As a result, BLM adopted an approach that focused on modernizing its automation-related capability so that the agency would have a consistent technical and data architecture. The decision to go forward with automation based on this comprehensive coordinated approach, rather than to propose fragmented projects, was made by the Bureau management team in mid-1989.

3 Automation Goals

Long-range Bureau goals are presently being developed. These concentrate on multiple use management, improving productivity of lands and resources, use of science and technology, human resource management, and partnership building and providing services. These long-term goals will be the framework of all Bureau activities.

BLM's automation goals reflect how automation will be used to support the overall business goals of BLM.

The following are the goals for automation:

1. Improve the speed and accuracy of responses to questions about the public lands and the activities permitted on them.
2. Streamline the processing of applications to use the public lands.
3. Ensure that a multiple-use land ethic is applied to meet the environmental, economic, and social needs and investments of the American people.
4. Make the BLM-administered Geographic Coordinate Data Base/Public Land Survey System readily available to provide an accurate representation of legal land parcels and to organize resource and records information in a parcel-based land information system.
5. Examine a greater variety of alternative management options and analyze more completely the potential impacts of each choice.
6. Share data efficiently between offices and with other users (including the general public) to provide a more comprehensive and up-to-date assessment of the public land resources and land status.
7. Simplify the production of accurate management reports, displays, and statistics.

4 Management Principles

BLM has defined its management principles for developing and implementing automated capabilities. These principles will provide a consistent management framework. No matter how fast the technology changes, these principles will be followed:

1. Land and resource data is an important public asset and will be managed as such.
2. BLM will collect and use data needed to support its land and resource management activities, as well as the administrative functions required in the agency. BLM will not inventory on-the-ground resources just for automation, but it will continue to identify them where there is a need for data to meet the multiple use mission of the agency.
3. Automated processes and technologies will be geared toward serving the users, including other agencies and the general public.
4. Current technology will be applied to the maximum extent possible. Technological risk will be minimized to the extent possible by the use of prototyping, training, functional and risk analyses, etc.
5. Data standards will be established and followed. BLM will develop standards for data which it maintains and will participate in interagency activities for data standards development. BLM will follow standards developed and accepted for data elements (categories) that are the responsibility of other agencies.
6. BLM requirements will be revised as necessary to address changes in agency needs, and implementation of automated technology will be driven by these requirements.
7. BLM will share and use data with other agencies in support of their missions. Redundant data entry will be replaced with timely data exchange whenever practical.
8. BLM will follow an analytical process for development, acquisition, and operation of automated data processing systems. Technology will not be purchased if it does not meet a defined need.
9. Information and data will be managed through a comprehensive approach. Systems will be designed to be simple, with a comprehensive Bureau system that will provide access to the automated data required by any field office.
10. In keeping with its human resources policy, BLM will utilize existing skills and staffing capability to the greatest degree feasible in meeting current and future needs by developing training or skills enhancement programs as necessary. New skills will be acquired as needed to supplement those already within the organization.
11. Information resources activities will be managed through the Bureau's standard line management structure. Organization needs will be assessed and changes will be made as needed to provide BLM flexibility to respond to fast-changing conditions.

5 Master Plan

The Master Plan is BLM's documented baseline of approved activities that are critical for meeting Bureau automation goals and that are programmed through the agency budget process. Management approval is required for making changes in this plan, with the level of management based upon the significance of the change proposed.

The Master Plan consists of this General Overview to provide strategic guidance and a Tactical Plan for implementing the strategy. The General Overview is updated once a year while the Tactical Plan is revised quarterly. Each BLM office completes an operational plan, based on the Master Plan, to manage its own automation activities. These operational plans, known as Information Resource Management Plan (IRMPS's), are completed in conjunction with local budget plans and must be constantly reviewed and updated.

As noted above, the General Overview describes the basic objectives and strategy for automation. It identifies how modernized technology will support BLM's lands, renewable resources, energy and minerals, technical services, and administration program managers and staff in multiple use decision-making. The General Overview provides the "big picture" of policy and direction for automation. With its Strategic Perspective component, it describes what BLM expects to achieve through automation and provides basic policies but stops short of describing in detail how BLM will obtain those objectives.

The Tactical Plan describes the significant tasks and actions for five categories: Data Management, Technology Management, People and Organization Management, Target System Acquisition, and New Program Initiatives. The Tactical Plan is BLM's primary tool for managing major automation projects and activities, defining accountability, and ensuring coordination between offices. The Washington Office builds budget requests to Congress and makes annual work plan allocations to field offices based on the timelines developed in the Tactical Plan. The Tactical Plan bridges organizational lines and reduces potential duplication of effort, emphasizing the five categories rather than describing projects primarily on a geographic basis or in terms of BLM's budget subactivities.

5.1 Bureau IRM Perspective

The IRM program will be managed in accordance with the management principles discussed earlier. The strategic perspective will be used to define the overall goals, objectives, and strategies for IRM program activities. The objectives for each individual IRM project must be tied to overall program objectives.

All automated system development is based on the BLM management direction that automation is not an end in itself but a support tool to assist field managers, resource professionals, and technicians, and administrative personnel in performing their duties.

In the case of large "corporate" projects that affect multiple BLM programs or offices, the Bureau Management team determines the scope and priority of IRM project initiatives. BLM's existing program-specific computer systems and data bases such as range, wildlife, oil and gas, and recreation, do not reflect either the capabilities of today's technology or the multiple use concept. To correct this shortcoming, Target System development will use the integrated land information management concept as a guide.

In addition to overall objectives and strategies, the following will be used:

1. **Life Cycle Management (LCM)** - used to guide each system from initiation to

decommission; ensures that top management officials agree with the need for and benefits of the proposed system.

2. **Enterprise Data Model (EDM)** - used to ensure that automation initiatives meet the organizational goals as efficiently and effectively as possible.

3. **Configuration Management (CM)** - provides the guidance to identify and document program-specific functional and physical characteristics of hardware, software, and data configuration items; controls changes to these items; and records/reports change processing and implementation status.

4. **Quality Assurance (QA)** - ensures that software meets program requirements and all standards, that testing is comprehensive, and that deficiencies are tracked and corrected.

5. **Documentation Management (DM)** - provides guidance on development, storage, access, and maintenance of documents required for systems throughout their life cycle.

6. **Information Engineering (IE)** - used for building and implementing systems components used to support a data structure; information engineering will be integrated into the Bureau's LCM.

These, as well as other tools, will be used to manage the Bureau's IRM program.

The Bureau's strategy is to acquire an enhanced automated data processing capability in the mid-1990's. This capability, to be purchased through a competitive procurement, will provide a common platform of software, hardware, and telecommunications for data processing applications. The Bureau recognizes that the management of its human resources and data assets are critical to successfully implementing a Bureauwide automation strategy that links together Bureau systems. Thus an important component of BLM's strategy involves the development of data, preparation of the organization, and use of existing system technology to enhance the use of automation and to provide a smooth transition to the new system capability, or target system, when it is acquired. This total process of moving from our current use of automated tools to a more fully integrated automated environment is termed modernization.

The Bureau strategy is to move away from having the technology manage the program and, instead, to have the program manage the technology. The overriding goal of BLM is to ensure that automated systems are developed which allow users to perform their jobs more quickly and easily. Systems will be based on how users work with data in their daily activities.

Systems development will be based on providing common functionality needed across all or many Bureau programs. Individual systems for program-specific requirements will be minimized; rather, the Bureau will focus on multiple program functions, such as case processing. BLM intends to avoid creating further islands of automation through fragmented systems development, as is so often the situation today.

BLM will use the next several years to develop an organization capable of supporting and managing the new technology. Policies for the program tools discussed above will be developed and implemented. Systems development or enhancement will be those which will allow BLM to prepare for the Target. Development of new capabilities during the interim will focus on improving the quality and accuracy of Bureau data and preparing people to work in an automated environment. This will be true for mainframes, minicomputers, and microcomputers alike. Interim software releases will be used to prepare the records data for the Lands and Minerals portion of the Target System. These releases will be used to improve the consistency and accuracy of data and to assist in the development of data standards.

The Map Overlay and Statistical System (MOSS) family of software may be revised to incorporate a relational data base management system to facilitate standardization and quality control of resources data.

However, these interim releases and improvements will be limited in scope and are not intended to provide the capability envisioned in the Target System. System enhancements during the interim period will vary. Enhancements to administrative systems will be minimal, while those planned for records systems to streamline the data updating and reporting will provide significant benefits in the short run and will assist the transition to the Target System. Bureau investments in the resources and technical services applications may be appropriate before incorporation into the Target System given the projected timeframes. However, these investments, developments, or enhancements will be required to go through a life cycle management process to determine the cost and benefits of the proposed enhancement.

BLM will implement new capabilities on a step-by-step basis and in a coordinated fashion throughout the 1990's. Each stage will build upon the successful completion of the previous stage to move towards a Target System that provides linkage in a common hardware, software, and telecommunication platform. The first stage of Target System implementation will involve the Administrative functions presently residing on the Bureau's Honeywell architecture. This will be a straight conversion of existing systems; no enhancements will be made. This has placed a high priority on the Software Improvement Program (SIP) presently being conducted by the Service Center for Bureauwide applications. States will need to work on their own SIP for their state-specific software.

The next development and implementation module of the Target System will be ALMRS which will substantially improve existing manual and automated systems capabilities for Land and Mineral records. The ALMRS models also include the linkage of records and the Geographic Coordinate Data Base (GCDB).

Candidate modules to be considered for development and implementation after ALMRS will benefit BLM's resource management and technical services programs. All candidate modules will be engineered using a common information engineering and life cycle methodology to reduce the technical risk in integrating the separate stages of development and maximize the opportunities for reusable design and code.

In the future, BLM expects to provide automated resource, survey, and land status data for specific public land parcels. The Target System is expected to provide a common platform of hardware, software, and data communications technology to simplify training and operations, as well as to minimize costs of maintaining systems.

The procurement of additional corporate automated capabilities is intended to facilitate access to data for both Bureau personnel and the public. The comprehensive Target System platform approach reflects the way data is shared throughout the agency and across organizational lines. It is based on analyses of BLM's significant data and functional requirements, particularly how the agency's data is used to make land use decisions, as documented in the Enterprise Data Model.

The implementation of Target System technology at the field office level will allow use of records and resource data, tied together by the Geographic Coordinate Data Base, in day-to-day operations.

5.2 Data Management

This section describes what activities are occurring in the data management field and how employees can participate at the State, District, and Resource Area levels. A key concept to remember is that tasks should be carried out in concert with the Bureauwide effort, particularly with regards to data standardization and subsequent data collection.

Data Management sections are arranged to portray the major activities which are occurring in a logical order. Strategic data planning activities are presented first followed by more data-specific activities. The reader will note that certain data bases like the Geographic Coordinate Data Base or Resource Base Data appear in many activities as they progress through the cycle from modeling to standards development to data preparation.

Major data management activities include data strategy and planning, mid-level data and process analysis, logical data modeling, existing and proposed data standards, data collection plans, data preparation, records administration, and information/data integrity planning strategy.

The way BLM uses data is central to the Bureau's approach to automation. The Bureau is defining its data requirements through an analytical method known as information engineering. This requires extensive involvement from management, program specialists, technical staff, and IRM personnel. A data administration program is being implemented by a Bureau Data Administrator, assisted by State Office Data Administrators and others. They, supplemented by contractors where needed, will train and facilitate program specialists in completing and updating the analyses, including an Enterprise Data Model, detailed data flow diagrams, and detailed logical data models. Program managers will be responsible for maintaining and updating the analyses to ensure they reflect changes in user requirements or program direction.

These analyses will assist in the transition from paper-based records to automated files, and from fragmented computer systems to the Target System. BLM will identify the current procedures for managing the existing data and will ensure that new systems provide at least the same capabilities to retrieve and maintain data as the old systems they replace. The current data element dictionary will be updated to ensure that it is useable in the new automation environment.

Data standards and physical data base designs for interim systems developments will be based on these analyses as soon as is feasible. Data standardization will include data element (entity) standardization, with a new data element dictionary for attribute data and graphics symbology standards. Hard copy records will also reflect the standards -- a new form of Master Title Plat will be adopted, for example, with Bureauwide standards for defining categories of status. These standards will also address the use of standard color and shading patterns. The interim time period and the interim software releases will be used to help the Bureau prepare data for the Target System.

BLM will emphasize developing data sharing agreements with other agencies (including state and local governments), interest groups, and companies to minimize duplication of effort. Current efforts center on local and state agencies and other federal land managing agencies including the U.S. Geological Survey and the Bureau of the Census. Some discussions are underway with industry and environmental groups as well.

Data security policies and procedures will minimize on-line access to BLM systems, except physically from the public rooms or as part of prototyping, until ALMRS is implemented successfully and system sizing concerns have been resolved. Data access policies will be adjusted if needed as Congress, the Office of Management and Budget, or others issue guidance. Current policy is to maximize sharing of the data BLM collects for its own use.

BLM will propose land status and Geographic Coordinate Data Base (GCDB) standards for adoption through the Federal Interagency Coordinating Committee on Digital Cartography as Federal Information Processing Standards (FIPS). This will be presented to the National Institute of Science and Technology for adoption across all Federal agencies to simplify the data exchange and to improve consistency.

Data automation priorities are established by the implementation schedule of the Target System. Since ALMRS will be implemented early in the Target System, the records case files are being "cleaned up," including purging excessive documents, and the data elements missing from automated files are being entered and verified. Records management procedures will change rapidly until the automated files are accepted as official records. BLM will continue to work closely with the National Archives and Records Administration to develop acceptable procedures for electronic records management.

After ALMRS data, the next priority for standardization and quality assurance is the data in the resources programs. An additional priority is the automation of the Resource Base Data, which consists of four fundamental themes of data needed for virtually all resource management decisions (topography, hydrography, roads, and cultural features such as buildings).

5.3 Technology Management

This section identifies activities required to manage the Bureau's information technology resources from now until the current functionality/capability is replaced by the Target System components at each site. Information Technology encompasses the following functions which apply to the current technical architecture of the BLM: configuration management, site security, interim telecommunications management, operations and management, software development, software maintenance, cost accounting/cost recovery, the Software Improvement Program (SIP), and transition plan development for current hardware systems.

The telecommunications network is changing from a centralized Honeywell network to a distributed network of Prime computers and later target system computers. It has reliability problems and connectivity needs for approved efforts. These needs and problems will be addressed during the interim period.

Conversion of a large portion of the Bureau's current software base to the Target System computers is planned. This is a two-step process of improvement (called the Software Improvement Program) and conversion. The software will be improved prior to Target System award and converted to the target system contractor. This must be done for all current software that is to be operational on the target computers.

All of the Bureau's current base of Honeywell, Prime, and other computers (Data Generals, Wangs, and Hewlett Packards) will eventually be replaced by the Target System hardware. Generally, the software must be converted or archived, the Target System hardware must be in place, and access to the target computers must be available in order to release this equipment. This will be necessary because of the high cost of operating and maintaining the equipment. The Master Plan lays out actions and procedures to accomplish these conversions in a manner that will preserve availability to users while minimizing the operation of duplicate systems.

5.4 People and Organization Management

This section describes how BLM will address cultural change and prepare its organization, its workforce, and its managers for Information Resource Management and Modernization.

Organization Transition - Automation efforts are often viewed as conflicting with current work. Many new positions for coordinators, data and records administrators, and data base managers have been created which has lead to a confusion of roles, responsibilities, and organization locations. A clarification of roles and responsibilities relating to IRM and the consistent organizational placement of responsibilities throughout the Bureau is essential to the successful management of the Bureau's information resources.

The automation functions and responsibilities identified as appropriate for the future will be institutionalized to prepare BLM employees to move forward into an era of automation/modernization. To create the framework for accountability and responsibility, organizational documents such as functional statements are being updated to reflect the automation responsibilities appropriate to each organization. Additionally, pertinent IRM functions will be reflected in position descriptions, individual development plans, and performance evaluation criteria, and must be reflected in recruitment for vacant positions.

Personnel Transition - BLM must identify the automation skills necessary to perform the functions of each job. The method of acquiring the correct skills must also be determined. An integrated strategy of obtaining skills through training, recruitment, and contracting is being developed. The strategy will identify criteria for each method of skill acquisition and will provide concrete assistance to the field in obtaining the skills. Where training is required, individual development plans will be modified to identify the new training needs or new training plans will be prepared. Bureauwide training efforts must be planned to meet broad training needs. Where recruitment is necessary, rating plans and position evaluations for vacancy announcements are to be developed to reflect the automation skills, knowledge, and abilities necessary for satisfactory job performance. Where contracting is appropriate, a statement of work must be developed to ensure that contract performance meets expectations.

Cultural Transition - Automation is a major change in the Bureau and is having significant impacts on the Bureau culture. User acceptance has been identified as low, giving a strong indication that there are issues and concerns that need to be dealt with prior to the installation/implementation of major automation initiatives. These issues and concerns appear to reside in three major areas: impacts directly on individuals, impacts on the culture of the Bureau, and impacts on the external organizations and people who have interests in or work with the Bureau.

Potentially, impacts that directly affect individuals may include concerns about their job and interpersonal/job relationships - how will their current job change, how will their chances of getting other jobs be impacted, what new skills will they have to learn, how will it impact their opportunity to do "on-the-ground" work, how will relationships with supervisors and peers be affected, etc.

Impacts on the Bureau culture are less visible, but may be more dramatic. Where automation comes in conflict with Bureau culture, it will affect the ability to implement automation initiatives. Potentially, impacts on Bureau culture may encompass a wide variety of issues including conflicts between automation and traditional Bureau norms of decentralization, program and office autonomy, emphasis on resource management and on-the ground work, and informal communications. Users also perceive that automation is driven from the top without true consideration for end user needs or mission accomplishments.

Public expectations of how the Bureau will respond to their needs may come in conflict with new response methods and procedures in an automated environment. A strategy for accomplishing effective inreach and outreach efforts is essential to the success of the modernization effort.

Managerial Transition - There are many policies and decisions relating to automation that have yet to be formulated. A formalized process which ensures issues are raised to the appropriate policy maker and resolved in a timely manner is essential and is being put in place. Additionally, managers must understand, advocate, and manage IRM to accomplish the Bureau's multiple-use mission. This must be facilitated by providing management with adequate understanding of the principles and practices of automation, the philosophy and implementation of Information Resource Management, and the skill to guide the use of modernization tools to perform their program functions and provide leadership in all modernization efforts.

5.5 Target System Acquisition

The Target System acquisition comprises project activities using the life cycle management (LCM) approach for meeting BLM mission needs. Project activities addressed in this include system management, system requirements analysis, source selection and contract award design and development, facilities preparation, system installation, transition, documentation management, integrated logistics support, configuration management, quality assurance, security, test and evaluation, certification and acceptance, and operations and maintenance. This is a 10-year IRM strategy for BLM and will be directed by the program management office in the Washington Office. Based on direction from the program management office, the target system tactical plan manager will develop project plans for each functional capability. The major thrust for this strategy is that current IRM system capabilities will not satisfy current and projected mission needs.

The Target System project will provide a modernization platform of compatible hardware, software, and data communications technology that will meet the BLM's mission functional needs. Through the platform strategy, BLM is tying together the initially separate efforts to modernize administrative systems, the Automated Land and Mineral Record System, resource management, technical services, and integrated data.

The four major functional components are Administration, Lands and Minerals, Resources, and Technical Services. Implementation of the last three components (especially Lands and Minerals together with Resources) will produce a Land Information System (LIS) where records, resource data, and coordinate data are available for multiple use management decisions on individual parcels of land. The Lands and Minerals component is what was originally developed as the ALMRS project.

The Administration component will provide office automation capabilities and will re-host the existing administrative systems. The administrative system will also link to the Departmentwide systems that are currently under development.

The Lands and Minerals component will provide and process information on the status of land parcels and will dramatically improve BLM's ability to process cases, respond to public inquiries, and develop management reports and statistics on land and mineral records.

The Resources component will provide the analytical capabilities to identify resource management alternatives and the complex impacts associated with different options using GIS capabilities. This will allow resource management planning, stipulation development, riparian management, and other resources management issues to be based on more accurate, timely and quantifiable data.

The Technical Services component will provide the remaining automated capabilities needed for the fire, engineering, Cadastral Survey, and other similar programs.

5.6 New Program Initiatives

This section identifies the new proposed IRM activities that can have an impact on either the Interim Period or the Target System. These proposed activities will be reviewed by the Washington Program Office through the BLM Configuration Management Board. The Configuration Management Board serves as the top level policy and decision-making body for BLM IRM. This Board will establish Bureauwide information policies, set management and budget direction, and provide the strategic direction for future development and improvements in the application of information resources. The Board will review the proposed activities to ensure conformance with their established policies and direction, and to specifically ensure that the activities do not:

- Duplicate Target procurement elements;
- Generate conflict with OMB and/or Interior Department directives;
- Exceed the Service Center's developmental capabilities;
- Exceed the Field's capabilities to operate and maintain the systems.

After the proposed activities have been reviewed and approved by the Board, they then become eligible for funding consideration.

1. **Automated System for Acquisition Processing (ASAP)**: This system automates all procurement functions, currently implemented manually, from creation of the requisition to closeout of the order or contract.

2. **Federal Financial System (FFS)**: BLM is developing interface and reporting programs for use with the Federal Financial System (FFS). FFS is a Department of Interior-wide system operating on the Bureau of Reclamation's hardware at the Administrative Service Center in Denver, Colorado.

3. **Law Enforcement Incident Reporting System (LEIRS)**: LEIRS consists of conforming to and entering data into the FBI reporting system.

4. **Federal Payroll Personnel System (FPPS)**: The System consists of implementing the Federal Payroll Personnel System on the Bureau of Reclamation's system at the Administrative Service Center in Denver, Colorado.

5. **Volunteer Reporting System (VRS)**: VRS consists of consolidated reporting of the volunteer program statistics.

6. **Wildlife and Fisheries Information System (WFIS)**: The WFIS consists of several subsystems running on various platforms. The systems are presently being analyzed to determine the degree of further development and/or enhancements during the interim timeframe.

7. **Maintenance Management System (MMS)**: This task involves the continued development and implementation of the Facilities Maintenance Management System which will formulate a plan for inventory, facility maintenance, and site operation.

8. **Solid Leasable Minerals System (SLMS II)**: This system provides information on Solid Minerals Leases and will be used until the target system version is implemented.

9. **Cadastral Survey Automation**: This activity involves the development of systems necessary to further automate measurement and management activities in the BLM cadastral program.

10. **Initial Attack Management System (IAMS II)**: IAMS II involves standardizing BLM IAMS hardware and software with IAMS used on an interagency basis for fire suppression activities.

6 Summary

In total, the BLM Master Plan for Automation provides a road map that will be updated, revised, and added to, which will guide BLM's activities for automation and data management. It reflects a recognition of the large work effort needed to achieve the Bureau goals. More importantly, however, it reflects a commitment to using automation as a tool in meeting the challenge of effectively carrying out Bureauwide mission responsibilities.

The Bureau of Land Management

Master Plan for Automation

Tactical Management Plan

For further information,
contact the Assistant Director of Support Services
FTS 343-3897

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10 Initial Attack Management System (IAMS II)

The Bureau of Land Management

Master Plan for Automation

Data Management

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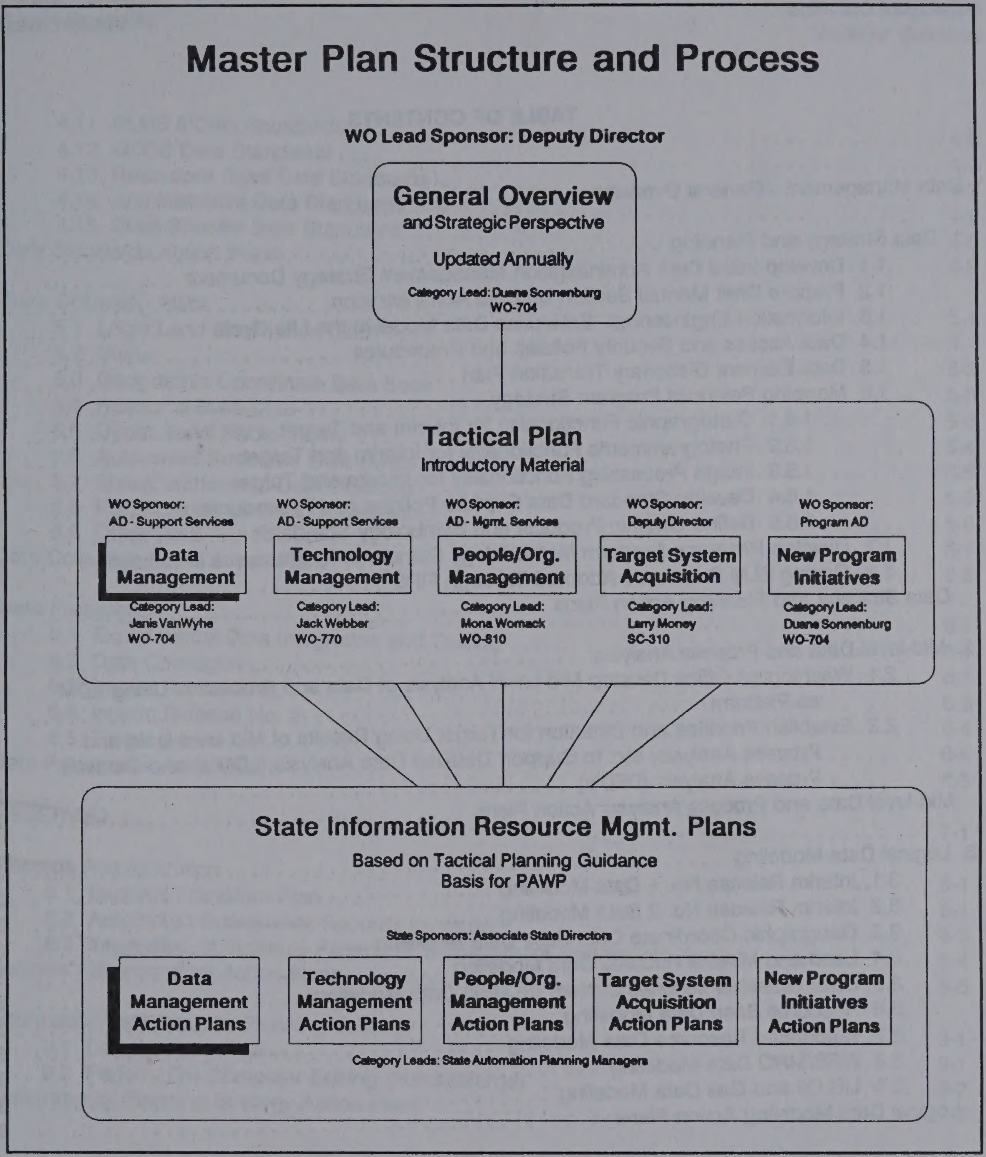
Master Plan Structure and Process
WO Lead Sponsor: Deputy Director
General Overview
and Strategic Perspective
Updated Annually
Category Lead: Duane Sonnenburg
WO-704
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AD - Support Services
Data Management
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AD - Support Services
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Data Management - General Overview

Data Management is related to the three other major activities in the tactical plan in preparing for automation in that it is a foundation for the automation effort. Data must be prepared to go into the Target System so that clean reliable information will be available for all users including the public and other agencies. The Interim time period and the Interim Releases I, 2, etc., will be used to help the Bureau prepare data for the Target. The Bureau must standardize and normalize its use of data elements for use in a relational data base management system. The current Data Element Dictionary will be updated and added to ensure that we can use it in the new automation environment.

The Data Management section of this plan will help to communicate to all Bureau personnel what activities are occurring in the data management field and will help them to understand what they should be participating in at the State, District, and Resource Area levels. A key concept to remember is that tasks should be carried out in synch with the Bureauwide effort, particularly with regards to data standardization and subsequent data collection.

The Data Management sections are arranged to portray the major activities which are occurring in a logical order. Strategic data planning activities are first in the section and are followed by more data-specific activities. The reader will note that certain data bases like Geographic Coordinates Data Base or Resource Base Data appear in many activities as they progress through the cycle of preparation from modeling to standards development to data preparation.

1 Data Strategy and Planning

This activity involves the various activities associated with strategic information planning and the development of policies and procedures for managing the BLM's data. It includes the Data Administration Management Strategy Document which is the collection of policies, procedures, and products related to the data administration program.

The section includes a transition plan for the data element dictionary, development of standardized digitizing policies and procedures and the task of developing resource program methodology standards for resource information gathering.

A. Assumptions-

- The Washington Office promulgates policies.
- The Service Center and the States (State Data Administrators) will contribute to the development of policies/procedures.
- Managing the Bureau's data is one of the largest single tasks facing the Bureau.

B. Policy Considerations-

- Specific IMs will promulgate policy and that which is appropriate should be manualized.

1.1 Develop Initial Data Administration Management Strategy Document

Task Manager: Janis VanWyhe WO-704

The Data Administration (DA) Management Strategy Document will be a collection of the policies and products of the Bureau's data administration program, including the basis for the Bureau's information engineering--the Enterprise Data Model. The strategy document will contain data administration strategy and policies, (including data collection, documentation of Life Cycle Management, modeling, dictionary management etc.) Located in the DA Strategy Document will be up-to-date priorities for Logical Data Modeling (LDM) to be done at the Service Center for Bureauwide data and systems, responsibilities of data administration as well as administrators, including manual sections as they are developed, relationship with records management, glossary of terms, standardized State Data Administrator (SDA) and other DA position descriptions, proposed data administration charter, and other products of DA. A standardized list of Assistant Directors' Data Administration (ADDA) duties will also be developed for inclusion in the manual, and an analysis of which ADDA positions should be full-time will be prepared.

The proposed Data Administration Charter is to help the BLM Data Administrators develop a more effective program that will be responsible for providing advice to the field committee and other Bureau management relative to management of manual and automated spatial and alpha/numeric data.

A. Assumptions-

- DA Strategy Document is a repository which will be regularly updated.

- The DA Strategy Document will primarily contain results, and not tasks or plans; tasks and plans will be placed in the Tactical Plan.
- Material appropriate to BLM Manual sections will be placed there after an initial documentation in the DA Management Strategy Document.
- The WO and SC will coordinate to prepare this product and ensure that roles are organized.
- A standardized PD for SDAs will be developed and classified once at WO and used by states as needed.
- Those states which have SDA positions filled under other position descriptions or at different grades than the classified standard should upgrade the PD as to content and/or grade as necessary.
- States are recommended to use the PD for consistency within the program.
- The DA Charter will help the DAs in the bureau to more effectively carry out their responsibilities in advising management on policies and leading work required to manage the Bureau's data prior to the implementation of the Target System.

B. **Policy Considerations-**

- Specific IMs will be developed on an ongoing basis. The completed policies will be placed into the DA Management Strategy Document.
- Standardized SDA PDs will be consistent with BLM Manual Sections.
- Other SDA PDs used in states must be consistent with BLM Manual Section.

1.2 Prepare Draft Manual Section on Data Administration

Task Manager: Janis VanWyhe WO-704

This task involves the development of a Data Administration manual. The Data Administration function is a new BLM support program. With the vision and anticipated capabilities of the Target System, the Bureau has realized the value and importance of its data. With the power to combine and analyze great quantities of data quickly, comes with it the responsibility of safe-guarding and maintaining that corporate asset.

Although portions of this Data Administration function have traditionally been managed by Information Resource Management (IRM) and Records Management organizations, Data Administration is now being packaged into a comprehensive set of criteria, policies, and functions that will give prominence to the over-all management of BLM's information.

The Bureau Manual will provide the guidance for the establishment of roles, responsibilities, and delegated authorities. This task describes the process by which all the functions of Data Administration will be identified and documented in Bureau Manual guidance. Washington, Service Center, and State Office Data Administration roles, responsibilities, and authorities will be described in one manual section.

A. Assumptions-

- A new Manual section will be necessary.
- Such development will be completed in FY 90, and organized by task based on greatest need or benefit.
- As with all manual sections, this manual section will be reviewed and approved prior to finalizing.

B. Policy Considerations-

- The Bureau's Data Administration program must be developed and placed in the BLM Manual System for official policy documentation.

1.3 Information Engineering: Enterprise Data Model in the Life Cycle

Task Manager: Janis VanWyhe WO-704

The Enterprise Model (Step 1 of Figure 2-1 and Action Steps 1.3.6) will be comprised of the Bureau of Land Management's organizational (business) goals and objectives and the Enterprise Data Model (see below). It will include a link between the two showing how each of the Bureau's current subfunctions and data used in each help to implement the organizational goals. This can be used to help prioritize our automation efforts beyond Target Phase 1, ALMRS, to help implement our goals and objectives. In other words, use our understanding of organizational functions and data to help ensure that the path of automation can help to obtain the organizational objectives most effectively. The Enterprise Model will serve as the documentation to guide the organization on what our goals and objectives are for the foreseeable future, in terms of trends and plans for program emphasis and de-emphasis. Top management should revisit these goals periodically to update them. The Enterprise Model should be completed by end of third quarter FY 90.

The BLM Enterprise Data Model prepared in the Washington Office in 1989 is the second step in the process of developing a strategic information plan for the Bureau (see Step 2, Figure 2-1). Using a James Martin-type approach, it is the part of the Enterprise Model which gives a global picture of the Bureau's functions and related data portrayed at a general (coarse or non-detailed) level. The general level allows analysis of the overall organization; its functions and use of data in these functions.

The EDM shows us that there are 26 subfunctions which the Bureau carries out, each composed of a number of processes. It shows that there are 18 groups of data (data class subject areas) used in these subfunctions, each containing a number of data classes (general categories of data).

The BLM Enterprise Data Model establishes the framework for the development of the Target System. It is the platform for data planning and analysis and process analysis, and subsequent systems design and development for the Target System. After completion of the Mid-level data and process analysis (see below), it will allow Headquarters and/or Bureau Management Teams to establish priorities for the development of the Target System beyond the Automated Land and Minerals Records System (ALMRS).

The ALMRS actually falls within the EDM as a large part of the Authorizations/Case Processing subfunction which uses primarily the Authorizations Data Subject Area. Other programs also perform the processes within this subfunction with some differences in specific activities and data.

In studying the EDM, we find that most of the various mission and support programs carry out common subfunctions and a few programs perform some unique subfunctions. Different data may be used by individual programs, but the processes used are not particularly unique. There are differences in names for processes or products but the commonalities are clear. We anticipate that beyond this common platform, at a detailed level, some programs can be shown to carry out some activities which are unique. The mission programs will have unique program management data beyond the basic environmental data which is used by most, such as vegetation, soils, water, etc. The similarities apply to mission programs including wildlife management or timber management as well as support programs like program evaluation or personnel management. Examples of common subfunctions are "administrative appeals process," "decision making," "inventory," "monitoring/inspection," "outreach," and "authorizations/case processing." It provides the basic organizational platform for the more detailed data analysis--logical data models, and process analysis--data flow diagrams.

Further analysis must be a mid-level entity (data) and process analysis (see Step 3 of Figure 2-1), and then the detailed entity relationship of diagrams (Detailed Logical Data Models--Step 7.0 of Figure 2-1) and Detailed Data Flow Diagrams of the proposed Target System (Step 5 of Figure 2-1). These would be an evolution of the detailed data flow diagrams of the existing lands and minerals activities prepared several years ago (Step 4 of Figure 2-1).

A. Assumptions-

- Strategic Information Planning has been recommended to the Bureau for many years, and is now being used to the point of preparing the Enterprise Data Model. However, preparation only of the EDM will not do more than provide the bidding vendors with a good picture of the Bureau's business and related data. The BLM must also use it as the basis for further data and process analysis so that the design of the Target System will best meet the Bureau needs. The further data and process analysis work would be carried out first in the WO at the mid-level, then at the SC at the detailed level.
- The Enterprise Model reflects up to date agency goals approved by Headquarters Management Team and Bureau Management Team.
- The Logical Data Model work being done at the SC is at a considerably more detailed level, and portrays the entity-relationships within and between the Data Classes of the EDM.
- The Resources Data Set Standardization Project is the identification of corporate data elements for information within some of the EDM Data Subject Areas. For instance, the common Resources Data Sets are subsets of the EDM Data Class Subject Area of Collected Data, the Land Use Planning Data Set is a major subset of the EDM Data Class Subject Area of Plans, and the Resource Management Data set assignments including Data Class Subject Areas of Analysis, Authorizations, Compliance/Enforcement, Evaluation, Monitoring/Inspection, Report and Collected Data. These will be incorporated

and integrated through the logical data modeling process. A policy on interim use will be developed by WO-700.

- Enterprise Data Model will be field checked in New Mexico to ensure integrity.
- The Bureau Data Administrator is responsible for developing and maintaining the Enterprise Data Model.
- Information engineering will be used to develop priorities, assure integrated services and cost/benefit analysis for the Target System and subsequent automation.
- The Bureau Data Administrator will work with Washington Office managers and program leaders and the SC IRM divisions to assure integrated data and processes for the Target System and subsequent automation. Field Office personnel will also be represented in this effort.

B. Policy Considerations-

- The Enterprise Data Model is the baseline for the Bureau's information engineering.
- Policy must be developed to ensure that modification of the EDM is one of the tasks that the WO program offices do when they change their procedures, as a result of law, EO, etc.

1.4 Data Access and Security Policies and Procedures

Task Manager: Rose Cummins WO-771

Data Access and Security Policies and Procedures are concerned with establishing the legal, regulatory, policy and procedural foundation and framework for managing access to Bureau information captured on all media. The development of these policies and procedures will allow the maximum amount of BLM information to be easily accessible by the public, enable BLM to recover costs for allowing access to this information, and provide adequate security to protect sensitive information.

BLM will be able to share/exchange information in a variety of media with external sources in the most mutually beneficial manner while adhering to the mandates of various Federal information access policies/procedures.

The tasks involve the development of current and future policies and procedures to ensure appropriate level of information dissemination to the general public and other government entities consistent with existing laws and regulations. This includes development of specific agreements procedures for testing and sharing/exchanging data with other government and private sector organizations.

The tasks associated with this activity also involve developing plans to ensure overall security of data and appropriate access levels are consistent with existing laws and regulations. This includes both data and physical installation security to prevent both unauthorized access, as well as, protection against loss, destruction, or alteration.

A. Assumptions-

- Interest in obtaining data from the Target System will increase dramatically, creating high demand for access and data which has not generally been shared with the general public. BLM will also require access to data from outside sources.
- Accountability/positions for monitoring implementation of the full range of policies and procedures will be established or determined as a result of the VanZanden Organizational Study.
- There are and will be many external entities who will want to share/exchange Bureau information in a remote/real time access mode.
- Adequate ADP security features for the Target System will be coordinated with by the Target System contractor to minimize risk of unauthorized access to Bureau information.
- The Bureau may adopt electronic data interchange procedures with public and private entities.
- Adequate security measures can be maintained in the Interim.
- Approval of results of FEDSIM Cost Recovery Contract to establish BLM information product fee schedule.

The tasks in this section are dependent upon issuance of cost recovery fees for interim and costs for future information products before these policies can be issued.

B. Policy Considerations-

- Approval of strategy to gain legislative authority to implement desired access policies/procedures.
- Development and approval of future information access policy.
- Joint policy to ensure consistency between information access and systems development.

1.5 Data Element Dictionary Transition Plan

Task Manager: Mike Thompson SC-322

This plan involves the management requirements to migrate the existing Data Element Dictionary through the Interim developments through to the Target System development. The plan must comply with current Federal standards defined in the Information Resources Dictionary System (IRDS) and naming convention requirements established by the Bureau Data Administrator.

A. Assumptions-

- The current DED and Interim dictionary applications can be integrated and applied to an IRDS.
- The components of the current DED will be migrated to the Target system to support SIP rehosted data bases.

B. Policy Considerations-

- As the Bureau's data dictionary operations and maintenance responsibilities are at the Service Center, development of a Data Dictionary Transition and Implementation Plan are Service Center objectives.

1.6 Mapping Sciences Program Strategy

Task Manager: Fred Batson SC-670

The Mapping Sciences are responsible for providing, updating, and standardizing significant amounts of the Bureau's spatial data (i.e., Resource Base Data (RBD), Automated Resource Data (ARD)). Mapping science tools and techniques are also critical to the GCDB and ALMRS programs.

In order to prepare Mapping Sciences data for the Target System and meet field office requirements, there is a need to evaluate and implement enhancements to the near term (FY 90-93) operational capabilities of the Bureau and develop standardized policies and procedures. These efforts must be accomplished fully cognizant of Interim and Target requirements and guidelines. These activities will be fully coordinated with GCDB and Target activities.

1.6.1 Cartographic Functionality for Interim and Target

Task Manager: Debra Carter SC-670

Evaluate and define needed operational enhancements to the Bureau's cartography program to ensure the continued support for field office resource management objectives within Interim and Target LIS environments. Scanner capabilities and requirements will be evaluated.

A. Assumptions-

- The completion of this task assumes continued development and implementation of the Interim LIS and award of the Target LIS.

B. Policy Considerations-

- No written policies exist which require or guide this effort.

1.6.2 Photogrammetric Functionality for Interim and Target

Task Manager: Mike Hutt SC-670

Evaluate and define needed operational enhancements to the Bureau's photogrammetry program to ensure the continued support for field office resource management objectives within Interim and Target LIS environments. The prototype COTS evaluation effort will include the testing of edit stations and USFS Line Trace Plus system. The system will be evaluated for DEM production and as a supplement to ADS as an interim data capture capability.

A. Assumptions-

- o The completion of this task assumes continued development and implementation of the interim LIS and award of the Target LIS.

B. Policy Considerations-

- o No written policies exist which require or guide this effort.

1.6.3 Image Processing Functionality for Interim and Target

Task Manager: Jim Turner SC-670

Evaluate and define needed operational enhancements to the Bureau's image processing (remote sensing) program to ensure the continued support for field office resource management objectives within Interim and Target LIS environments. Local image processing requirements and capabilities will be evaluated.

A. Assumptions-

- o The completion of this task assumes continued development and implementation of the interim LIS and award of the target LIS.

B. Policy Considerations-

- o No written policies exist which require or guide this effort.

1.6.4 Develop Standard Data Capture Policies and Procedures

Task Manager: Mike Hutt SC-670

Policies, standards and procedures need to be developed to ensure that the Bureau assures quality at the data input/conversion process into an automated LIS. This effort will result in a data collection handbook that includes chapters on data sources, data capture techniques and processing procedures. There is expected to be considerable overlap between RBD and ARD methodology thus the handbook will serve for both databases.

A. Assumptions-

- o The Bureau will coordinate through the Interior Digital Cartography Coordinating Committee (IDCCC), Federal Interagency Coordinating Committee on Digital Cartography (FICCDC) its requirements and findings.

B. Policy Considerations-

- No written policies exist.

1.6.5 Define Graphic Products and Symbology Standards

Task Manager: Fred Batson SC-670

This task defines a process by which spatial graphics products are standardized across the Bureau. The need to portray specific information for specific purposes at uniform scales will be defined. The result will be a symbols library based upon program specific guidance and product needs.

A. Assumptions-

- The Bureau will coordinate through the Interior Digital Cartography Coordinating Committee (IDCCC), Federal Interagency Coordinating Committee on Digital Cartography (FICCDC) its requirements and findings.

B. Policy Considerations-

- No written policies exist.

1.7 Develop Resource Program Methodology Standards for Resource Information

Task Manager: Dick Traylor WO-340

Data Administrators in the Washington Office will develop a strategy to work with Washington Office program leaders to evaluate existing information collection methodologies. The purpose of this task is to develop a range of several standard methods of data collection for resources and land and minerals information which are compatible with an automated environment. Collection will often use automated methods, and the information will be used/manipulated in automated systems both alphanumeric and spatial in character.

A. Assumptions -

- This standardization effort applies to all renewable and non-renewable resources programs and the hazardous materials program.

- Each program office must exercise discipline to provide a range of alternative methods but limit the range to an approved standard selection.

B. Policy Considerations -

- An instruction memorandum to programs must be developed by the Bureau Data Administrator and Assistant Directors' Data Administrators.

1.8 Getting BLM Standards Adopted Through FIPS

Task Manager: Janis VanWyhe WO-704

Pursue getting BLM Standards adopted as Federal Information Publication Standards (FIPS) through the Federal Interagency Coordinating Committee on Digital Cartography (FICCDC) and the National Institute of Standards and Technology (NIST).

The Bureau Data Administrator will be the lead for this effort. At times, this may involve others from WO 704 or other offices. The intent is to put the BLM in the leadership role for certain standards and databases and carry out coordination. The responsibility involved with becoming the Federal lead through this process is relatively heavy in terms of long-term work, time commitment and responsibility to other agencies, and cannot be taken on lightly. Our current priority is to become a Federal Standard for the Geographic Coordinates Data Base and for Land and Minerals Records Data.

A. Assumptions-

- BLM is capable of taking on the lead for standards and database management of the GCDB and Land Records categories of data at this time.
- We will expand this as we are ready.

B. Policy Considerations-

- BLM LIS policy (WO IB No. 88-42, 11/2/87) states that BLM wants to share/exchange data to increase efficiency among Federal agencies collecting data. Taking the lead for some BLM data standards will help to implement this policy.

Task Title: 1.1 Develop Data Administration Management Strategy Document

Task Manager: VanWyhe WO-704

Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
1.1.1	Prepare Policy IMs as necessary	VanWyhe, WO-704	Russell	On-going	On-going		IMs	Signature	
1.1.2	Draft DA Management Strategy Document	VanWyhe, WO-704	Team (Thompson, ADDAs, Leopold, SDAs, Duval, etc.)	1/90	2/90 Tech Task 9.3 4/15/90		Draft Document for Review	Document Sent	
1.1.3	Review Draft DA Management Strategy Document	VanWyhe, WO-704	FC, DAs, IRMAC	4/15/90	5/15/90		Reviews to WO-704	WO-704 receives comments	
1.1.4	Finalize DA Strategy Document	VanWyhe, WO-704	Team	5/16/90	5/15/90		Final Strategy Doc.	Signed & Distributed.	Also working with Task 2.1 to develop other personnel papers
1.1.5	Prepare SDA Position Description	VanWhye, WO-704	Hoem (MT 950)	6/89	11/89		Draft PDs	Sent to WO-704	P&O (People & Organization)
1.1.6	Classify SDA PDs	McCoy, WO-823	VanWyhe, Hoem	2/90	2/90		Classified PD	PD to WO-704	
1.1.7	Distribute Position Description	VanWyhe, WO-704		2/90	2/90	Classification	Distributed PD	Signed IM	Distributed as part of O&P Task 2.1
1.1.8	Develop Draft Data Admin Charter	Hoem, MT-950		9/18/89	9/25/89	None	Draft	Draft	Completed
1.1.9	Review Draft DA Charter	Wing, AZ-954		9/25/89	10/2/89		Draft review	Markup	Completed

Task Manager: VanWyhe WO-704

Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
1.1.10	Revise Draft DA Charter	Hoem, MT-950		10/23/89	10/27/89	Reviewed Draft	Final Draft	Final Draft	Completed
1.1.11	Deliver DA Charter to Field Committee	VanWyhe, WO-704		5/90	5/90	Date of next FC Meeting	Final Charter	FC Accept,	

Task Title: 1.2 Prepare Draft Manual Section on Data Administration

Task Manager: VanWyhe WO-704

Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
1.2.1	SO Draft	G. Russell, WO-704	Team	12/1/88	12/5/88	SODAs, ADDAs, SCDA	Draft Manual	Review	
1.2.2	Draft Manual Review by States	G. Russell, WO-704	VanWyhe	6/1/89	8/1/89	SODAs, ADDAs, SCDA	Comments	Deadline Met	
1.2.3	Comments Reviewed	G. Russell, WO-704	VanWyhe	6/1/89	6/30/90	SODAs, ADDAs, SCDA	2nd Draft Review		
1.2.4	WO, SC, & SO Final Manual Draft	VanWyhe, WO-704	G. Russell, DAs, Team	7/1/90	7/15/90	SODAs, SC-320 P&O Task 2.1	Final Draft Review		
1.2.5	Final Draft Review	VanWyhe, WO-704	G.Russell, DAs	7/13/90	9/15/90	SODAs, SC-320	Comments	Deadline Met	
1.2.6	Final Manual Prepared	VanWyhe, WO-704	G.Russell	9/15/90	9/30/90	SODAs, SC-320	Consolidation of Comments	Final Format Drafted	
1.2.7	Final Manual Approved by Legs. & Regs.	VanWyhe, WO-704	Legs/Regs	10/1/90	10/30/90		Approved Manual Section	Return to WO 704	
1.2.8	Implement DA Manual	VanWyhe, WO-704		11/90	11/90	Approved by Legs/Regs	Manual Release	Director signs	

Task Title: 1.3 Strategic Data Planning: Enterprise Data Model

Task Manager: VanWyhe WO-704

Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
1.3.1	Prepare Enterprise Data Model	VanWyhe, WO-704	ADDAs, Leopold, Thompson	5/89	II/89	Support from WO Programs	EDM	Signed by Director	Will be maintained completed
1.3.2	Prepare Policy Document to Establish EDM as Tool to Manage Procedural Change	VanWyhe, WO-704		12/90	1/90		Signed IM		Later put in manual
1.3.3	Provide Briefings on EDM	VanWyhe, WO-704	ADDAs, SODAs, SCDA	II/89	2/90		Presentations	Presentations delivered	Ongoing
1.3.4	Develop Marketing Plan for EDM Logical EM Internal and External	VanWyhe, WO-704	Leopold	12/89	3/90		Marketing Plan	Plan completed	
1.3.5	Develop and Implement Strategy to Field check EDM in New Mexico	VanWyhe, WO-704	M.Thompson (SC) D.Hinrichson (NM)	2/90	4/90	New Mexico's ability to add this to FY90 tasks	Confirmation that EDM is accurate in test areas	Memo to WO-704 from NM documenting results	Modify EDM if results warrant

Task Title: 1.4 Data Access and Security Exchange

April, 1990

Task Manager: Rose Cummins WO-771

Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
1.4.1	Identify Public Records	Cummins	Solicitor Access Workgroups	5/89	11/89		IM	Approved	Completed
1.4.2	Develop BLM Short Term Information Access Policy	Cummins	Access Workgroups	11/89	3/90	Solicitor/WO/ Field Review	Policy Document	Approved Director Field Committee received	Will supersede IM
1.4.3	Publish Interim BLM Cost Recovery Fee Schedule	Cummins	Solicitor/ FEDSIM 770/Access Workgroup	4/90	7/90	Data 1.4.2, Technology 9.0	FRN, IM and/or Internal lists	IM signed 700	
1.4.4	Develop Information Access Regulations for Short Term	Cummins	WO Access Workgroup	12/89	9/90	Data 1.4.2 WO-140, Solicitor, Standard Regulatory Review	Proposed fund regulations	Final sup issued	
1.4.5	Identify Future Information Access/Dissemination Policy	Cummins	Solicitor, FAC, BMT Access Workgroup	1/90	2/90	Data 4.0, Target 12.0	Policy Document	Approval Director	
1.4.6	Develop Strategy to Implement Future Policy	Cummins	WO-704/ Solicitor, 110 Access Workgroup	4/90	4/90		Implementation Plan	700 Approval of implementation package	
1.4.7	Legislative Process	Moeller, Cummins		Upon Decision		WO-140, 704, Solicitor	Legis. Package	Training Approved	

Task Title: 1.4 Data Access and Security Exchange

Task Manager: Rose Cummins WO-771

Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
1.4.8	Develop Sample Agreements	Molinar	Procurement	4/90	5/90	WO-770/704/SOL	Agreement Templates	Approved 700	
1.4.9	Develop Strategy for Data Security Policies and Procedures	Cummins	SC-324, NM-950, WO-771	5/90	8/90		Policy Document	Approved by WO-700	
1.4.10	Develop RBD MOU's	Moeller	WO-704, SC-670	10/1/89	7/1/90	USGS Cooperation	MOU	MOU Approved, signed	

Task Title: 1.5 DED Transition Plan

Task Manager: M. Thompson SC-322

Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
1.5.1	Develop Guidance	Thompson SC-320	J.VanWyhe	3/1/90	4/1/90		Guidance	Approved by J.Moeller	
1.5.2	Evaluate Current DED	Thompson SC-320	J.VanWyhe	3/15/90	6/1/90	Data 2.5, 4.0; Target 2.0	Report	Review by J.VanWyhe	
1.5.3	Draft DED Transition Plan	Thompson SC-320	J.VanWyhe	6/1/90	8/1/90	Data 2.5, 4.0; Target 2.0	Draft Plan	Review by J.VanWyhe	Use of IRDS Standards
1.5.4	Identify Standard Naming Conventions	Thompson SC-320	J.VanWyhe	8/1/90	9/1/90	Data 1.1.1	Draft Naming Conventions	Review by J.VanWyhe	
1.5.5	Finalize DED Transition Plan	Thompson SC-320	J.VanWyhe	9/1/90	10/1/90	Data 2.5, Technology 7.2, Target 2.0	Final Plan	Approval by J.VanWyhe	

Task Title: 1.6.1 Cartographic Functionality for Interim and Target

April, 1990

Task Manager: Debra Carter SC-670

Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
1.6.1.1	Define Automation Requirements	Carter, SC-671	SCST	10/1/89	10/1/90	SC-671, Staff Resources	Report	Transmittal to WO-704	
1.6.1.2	Evaluate Planned Interim LIS Capabilities	Carter, SC-671	SC-340	5/1/90	3/1/91	SRS Document	Report	Transmittal to WO-704	
1.6.1.3	Evaluate COTS	Carter, SC-671	SC-340	10/1/90	3/1/91	Staff Resources, SC-340	Report	Transmittal to WO-704	Includes evaluation of scanners
1.6.1.4	Recommend Enhancements	Carter, SC-671	SCST	3/1/91	6/1/91		Written Recommendations	WO-700 Approval	Future steps dependent upon Interim and Target System capabilities and Management approval

Task Title: 1.6.2 Photogrammetric Functionality for Interim and Target

April, 1990

Task Manager: Mike Hutt WO-670

Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
1.6.2.1	Define Automation Requirements	Hutt, SC-671	SCST	10/1/89	10/1/90	SC-671, Staff Resources	Report	Transmittal to WO-704	
1.6.2.2	Evaluate Planned Interim LIS Capabilities	Hutt, SC-671	SC-340	5/1/90	3/1/91	SRS Document	Report	Transmittal to WO-704	
1.6.2.3	Evaluate COTS	Hutt, SC-671	SC-340	5/1/90	3/1/91	Staff Resources, SC-340, HW funding	Report	Transmittal to WO-704	Initial testing of Line Trace Plus
1.6.2.4	Recommend Enhancements	Hutt, SC-671	SCST	3/1/91	6/1/91		Written Recommendations	WO-704 Approval	Future steps dependent upon Interim and Target System capabilities and management approvals.

Task Title: 1.6.3 Image Processing Functionality for Interim and Target

Task Manager: Jim Turner SC-670

Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
1.6.3.1	Define Automation Requirements	Turner, SC-671	SCST	10/1/89	10/1/90	SC-671, Staff Resources	Report	Transmittal to WO-704	
1.6.3.2	Evaluate Planned Interim LIS Capabilities	Turner, SC-671	SC-340	5/1/90	3/1/91	SRS Document	Report	Transmittal to WO-704	
1.6.3.3	Evaluate COTS	Turner, SC-671	SC-340	10/1/90	3/1/91	Staff Resources, SC-340	Report	Transmittal to WO-704	Includes Local Image Processing evaluation
1.6.3.4	Recommend Enhancements	Turner, SC-671	SCST	3/1/91	6/1/91		Written Recommendations	WO-700 Approval	Future steps dependent upon Interim and Target System capabilities and management approvals

Task Title: 1.6.4 Develop Standard Data Capture Policies and Procedures

April, 1990

Task Manager: Mike Hutt SC-670

Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
1.6.4.1	Review Literature	WY-940 (Keating)	SCST, Ely SC-670	10/1/89	9/1/90		Documentation	SCST Review	
1.6.4.2	Consolidate Findings	WY-940 (Keating)	SCST, Ely SC-670	9/1/90	11/1/90		Draft Handbook	Field Review	
1.6.4.3	Finalize Data Source/Data Extraction Handbook	WY-940 (Keating)	SCST, Ely SC-670	9/1/90	5/1/91		Data Collection Handbook	WO-700 Approval/ Distribution	This effort is needed by an international audience, it would reflect a very positive image for the Bureau.

Task Title: 1.6.5 Define Graphic Products and Symbology Standards

Task Manager: Fred Batson SC-670

Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
1.6.5.1	Define Standard Themes and Requirements	Carter, SC-671	Data Set Teams, Oakland SC-320	4/1/90	10/1/91	Data 3.4, 3.7	Report	WO-704 Review	
1.6.5.2	Catalogue Existing Symbology (Phase I-L&M, GCDB, RBD)	Carter, SC-671	Thompson, Hutt	7/1/90	3/1/91	Data 3.4, 3.7	Report	WO-704 Review	
1.6.5.3	Crosswalk with Attributes and Data Elements (Phase I)	Thompson, SC-320	Carter, Hutt, SCST	3/1/91	5/1/91	Staff resources	Report	WO-704 Review	
1.6.5.4	Create Automated Symbol Generation Req (Phase I)	Carter, SC-671	SC-671	5/1/91	8/1/91	Staff resources	Requirements	WO-704 Review	
1.6.5.5	Review Phase I Design Req.	Carter, SC-671	SCST	8/1/91	10/1/91	SCST resources	Requirements	WO-704 Review	
1.6.5.6	Develop Symbols Library (Phase I)	Carter, SC-671	SC-671, SCST	10/1/91	2/1/92	Staff resources	Symbols Library	WO-704 Approval and Implementation	
1.6.5.7	Phase II Design (ARD Site)	Carter, SC-671	Data Set Teams, SC-320	3/1/92	3/1/95	Staff Resources	Symbols Library	WO-704 approval and implementation	

Task Title: 1.7 Develop Resource Program Methodology Standards/Policies for Resource Information Collection for Automated Data

April, 1990

Task Manager: Dick Traylor WO-340

Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
1.7.1	Develop Detailed Strategy and IM	D. Traylor, WO-340	VanWyhe, ADDAs	2/90	3/90				Pertains to WO Lands and Renewables, Minerals and Energy Resources and Hazardous Materials
1.7.2	Brief WO Program Staffs	D. Traylor, WO-340	VanWyhe, ADDAs	3/90	3/90				
1.7.3	WO Programs Develop Plans for Task	WO Division Chiefs	Traylor, ADDAs, VanWyhe, Division Staffs	4/90	6/90				
1.7.4	WO Programs Implement Task of Developing Updated Policies	WO Division Chiefs	Traylor, Division Staffs	6/90					
1.7.5	WO Programs Ensure Review of Draft Data Collection Standards	WO Division Chiefs	Division Staffs						
1.7.6	WO Programs Finalize Data Collection Standards	WO Division Chiefs	Division Staffs						
1.7.7	WO Programs Promulgate Data Collection Standards for Automated Data	WO Division Chiefs	Division Staffs						
1.7.8	WO Programs Direct Field Offices to Review their Existing Data for Adherence to New Collection Standards	WO Division Chiefs	Traylor, other ADDAs, VanWyhe						

Task Title: 1.8 Getting BLM Standards Adopted Through FIPS

April, 1990

Task Manager: Janis VanWyhe WO-704

Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
1.8.1	Identify Process Steps	VanWyhe, WO-704		1/90	2/90				
1.8.2	Identify What Databases to Pursue	VanWyhe, WO-704	Leopold, Thompson, SC-320		l/90	Establishment of Standards Data Task 4.0	Decision	Decision Documented	Must have standards in place before significant coordination is carried out.
1.8.3	Initiate with IDCCC & FICCDC BLM Intention	VanWyhe, WO-704		l/90	2/90	Standards in Works	Presentation	Formal recognition by FICCDC.	

2 Mid-level Data and Process Analysis

The mid-level process and data analysis is a further structured analysis to carry the EDM to a greater degree of detail. Processes will be broken into two to three lower levels such as "subprocesses" and then "activities." Likewise, data will be broken into smaller more specific subgroups.

Management will receive several benefits from the Mid-level Analysis. Washington program staff and field preparation of the Mid-level Analysis will help provide the Target Vendor data and process requirements to ensure that the Target System is developed as an integrated approach rather than a vertical program by program (stovepipe) approach. The Mid-level Analysis will provide the BLM Directorate with the necessary information to determine what specific activities beyond the land and minerals phase of the Target System can and should be automated. It will provide the necessary information about Bureau activities to apply a set of criteria and determine what the priorities for automation beyond the first phase should be. This will facilitate the development of a budget strategy and allow the identification of data preparation needs and schedules.

The Mid-level Analysis will also provide a clear framework to ensure preparation at the Service Center of integrated detailed process and data analysis (data flow diagrams and logical data models). Last, the preparation of the Mid-level Analysis will give the Washington Office programs a method to participate in the preparation for the Target System and provide them a better understanding of the Bureau's integrated activities and data needs so that they can participate effectively as appropriate in the Service Center interaction with the Target Vendor to follow DOD 2167A documentation for preparation of system technical specifications (Steps 9-15 of Figure 2-1).

The Target System will be developed based upon cross-program functionality to ensure the use of the automated processes by all applicable programs and to avoid development by functionally parallel and duplicate automated processes serving different mission or support BLM programs.

A. Assumptions-

- The Washington Office, certain Branches of the Service Center and the field offices must be prepared to participate in the Mid-level analysis.
- Upon deciding to use the EDM as described above, the Headquarters Management Team must be able to give the project priority because of a necessary time commitment for the people from the WO and the field who would be involved.

B. Policy Considerations-

- The decision has been made to use the EDM as a basis and to carry out the Mid-level Analysis to support the Life Cycle of the Target System (Directors IM 90-32, 2/12/90). This will be supplemented with a Bureauwide IM regarding the EDM. A commitment has been made for other development efforts toward the Target to work in lockstep with this effort; this must be followed through or it will not be fully effective.

2.1 Washington Office Develop Mid-Level Analysis of Data and Processes Using EDM as Platform

Task Manager: VanWyhe WO-704

This task of Mid-level process and data analysis will involve considerable effort organized similarly to that of the Enterprise Data Model. Field office representation on the teams will be necessary as determined by the combined program representatives for each subfunction. Contract facilitation will be necessary to ensure that the deadlines can be met and to share the workload. The Enterprise Data Model will be used to determine more detailed subfunctions and activities.

2.2 Establish Priorities and Direction for Target Using Results of Mid-level Data and Process Analysis, etc. to Support Detailed Data Analysis (LDM's) and Detailed Process Analysis (DFD's)

Task Manager: VanWyhe WO-704

This task refers to the development of criteria for prioritizing development of Target beyond the first stand-up module of Target-ALMRS, based on further funding and approvals from Office of Management and Budget, etc. A Land Information System is concept valid. The BLM needs additional integrated information and functionality to be added to the first stand-up module to fully gain the efficiencies of automation. This task includes developing some alternative approaches and priorities for further Target development. It also includes the decisions on such priorities. Accomplishing this task will allow BLM to develop further budget strategy based on the priorities. In addition, it will allow BLM to develop Data Preparation plans and schedules to support such priorities. Data Preparation requires a long lead time.

A. Assumptions-

- o LIS is valid; Target development will continue beyond Phase 1, ALMRS which was approved by OMB.

B. Policy Considerations-

- o A policy to continue on beyond the first stand-up module, ALMRS needs to be developed.

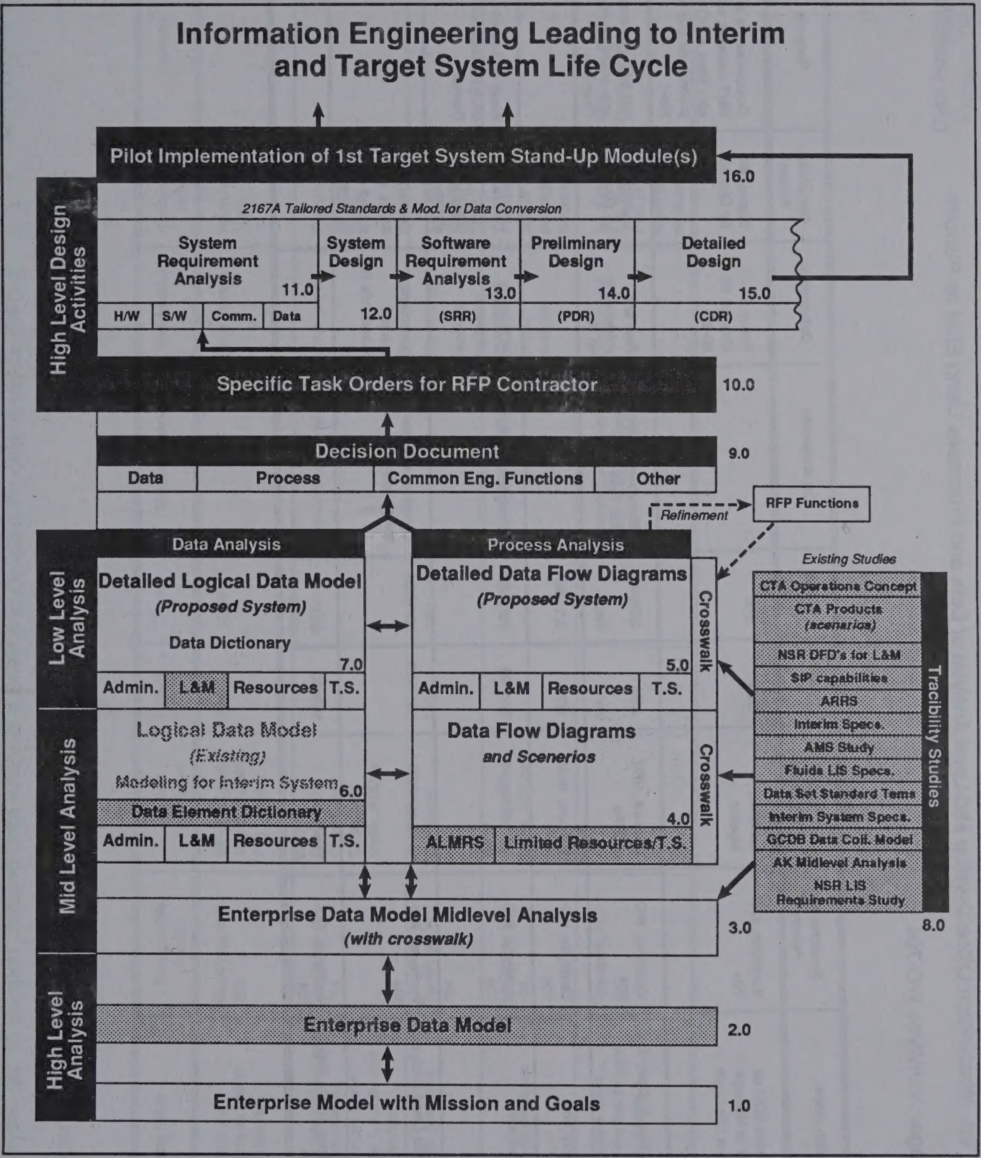

Figure 2.2-1. Information Engineering Leading to Interim and Target System Life Cycle

Task Title: 2.1 Washington Office Develop Mid-Level Analysis of Data and Processes Using EDM as Platform April, 1990

Task Manager: VanWyhe WO-704

Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
2.1.1	Decision to Use EDM as Primary Tool to Manage Target System Life Cycle	VanWyhe, WO-704	Leopold, Moeller	1/90	2/90		Policy IM - Director IM 90-32	Signed IM by Director	Completed - is an HMT decision, will also have a WO IM to promulgate this to Field.
2.1.2	Develop Strategy to Carry Out Mid-Level	VanWyhe, WO-704	C. Hunt, NSR, ADDAs	2/90	2/28/90	Affirmative Decision in Data Task 2.1.1	Plan and schedule in an IM	Signed IM by Director	Will take tremendous amt. coord w/ WO Programs
2.1.3	Prepare Activity Site, Equipment	VanWyhe, WO-704	C. Hunt, NSR	2/90	3/15/90				
2.1.4	Carry Out Analysis	VanWyhe, WO-704	NSR, Program Reps	3/12/90	10/15/90	Management priorities to support task	Completed mid-level analysis	Contract Task Manager signature	Week of 3-12-90 analysis occurred in Denver.
2.1.5	Promulgate Mid-Level Analysis	VanWyhe, WO-704	C. Hunt, NSR	10/15/90	10/30/90	Completion of mid-level analysis	Documentation to Bureau via IM	Delivery to SC et. al., signed IM by Director	
2.1.6	Provide Briefings on the Mid-Level Analysis	VanWyhe, WO-704	VanWyhe, ADDAs	11/1/90	On-going				

Task Title: 2.2 Establish Priorities and Direction for Target Using Results of Mid-level Data and Process Analysis, etc. to Support Detailed Data Analysis (LDMs) and Detailed Process Analysis (DFDs)

Task Manager: VanWyhe WO-704

Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
2.2.1	Develop Criteria for Decisionmakers to Use in Determining Priorities	VanWyhe, WO-704	SC-300 Chiefs and Staffs, WO-770, IRMAC, DA's	8/90	10/90		Final criteria	Approval by HMP	
2.2.2	Develop Draft Alternatives and Supporting Analysis for Priorities of Target System beyond Phase 1, Lands and Minerals for Review	VanWyhe, WO-704	SC-300 Div Chiefs and Staffs, WO Staffs, ADDAs	11/90	12/90	Completion of mid-level analysis	Issue paper	Completion of Issue Paper	
2.2.3	Review of Draft Alts/Issue Paper	VanWyhe, WO-704	Reviewers	1/91	1/91		Comments	Comments reviewed at WO-704	
2.2.4	Finalize Alternatives/Analysis/Issue Paper	VanWyhe, WO-704	SC-300, WO Staffs, ADDAs	2/91	2/91	Completion of reviews	Final issue paper/ analysis	Presentation of package to Directorate	
2.2.4	Bureau Directorate Make Decision on Priorities Beyond Target System, Phase 1	Stepanek, WO-100		3/90	3/90	Completion of final issue paper/analysis	Decision IM	IM, Entry into Master Plan in appropriate sections	Affects all sections of Master Plan

3 Logical Data Modeling

This activity involves the development of logical data models that will be incorporated into one corporate data model in support of the Interim and Target systems preparations. These models are constructed using entity and attribute relationships using CASE tools. The Target preparation includes the development of a data dictionary that is interactive with the model.

A. Assumptions-

- All Logical Data Models associated to Interim or Target activities must be cross-walked and managed against one corporate model that will serve the purpose of supporting the new system Life Cycle.
- The Corporate Logical Data Model will be developed and maintained at the Service Center.

B. Policy Considerations-

- The Bureau must accept one case tool for the development and management of the corporate Logical Data Model.
- There is no policy or guidance that identifies responsible parties, roles and responsibilities, or modeling products management.

3.1 Interim Release No. 1 Data Modeling

Task Manager: Jerry Carlander SC-344

This logical data model involves Alaska's AALRS, Case Recordation/ORCA, Mining Claim Recordation, and limited Legal Land Description (to the Section level only). System implementation is scheduled for the fall of 1990 in Alaska with beta test loads in New Mexico and Nevada in late 1990.

A. Assumptions-

- This logical data model, developed by the Division of System Engineering (SC-340), must provide all the data relationships necessary to replicate the AALRS capabilities, currently on Alaska's Burroughs, on a Prime/Oracle platform.
- This LDM must also provide most of the data relationships common to Case Recordation/ORCA and Mining Claim Recordation.

B. Policy Considerations-

- The Field Committee has approved the Interim Release No. I development to enable Alaska to move from the Burroughs to a Prime/Oracle Platform. The preparation of a logical data model is a prerequisite.

3.2 Interim Release No. 2 Data Modeling

Task Manager: Don Oakland SC-323

This logical data model involves enhancements to the Release No. 1 logical data model to support western states' data and functionality.

A. Assumptions-

- This Interim Release No. 2 logical data model, to be developed by the Division of Data Management (SC-320), must expand the Interim Release No. I model to include western states data requirements to accommodate the Case Recordation/ORCA, Mining Claim Recordation, LLD, and Status data files and Systems.
- Plat or graphics products may be generated, but would be limited dependent on the relational capabilities of the data.
- CR and MCR, LLD and Status will be fully integrated.

B. Policy Considerations-

- There is no written policy identifying responsible parties, roles and responsibilities, or certification of products. The Field Committee will be approached in late February 1990 for approval.

3.3 Geographic Coordinate Data Base Data Modeling

Task Manager: Keith Hedlund SC-326

The Geographic Coordinate Data Base (GCDB) is currently being modeled to the conceptual and logical stages. Version 3.2 of the GCDB Model was released September 14, 1989. Further enhancement of the current model is being undertaken to ensure de-normalization of the logical model prior to development of the physical model and data base design. Once the data model has been baselined, it will be incorporated with the Land and Minerals Records Logical Data Model (Task 3.4).

Version 3.2 will be used to develop a prototype effort which will allow testing of several concepts:

1. verification of the entities and their relationships;
2. identification of the minimum attributes for first pass data collection;
3. verification of the necessary links and coding conformity with other related data files, such as ALMRS, ARD, and RBD.

A. Assumptions-

- The GCDB model will be fully integrated with all other components of the Bureau Logical Data Model during all stages of the model development.

B. Policy Considerations-

- There is no written policy identifying responsible parties, roles, and responsibilities or certification of products.

3.4 Land and Mineral Records Data Modeling

Task Manager: Don Oakland SC-323

This task involves the continued development and management of the Land and Minerals Logical Data Model (LDM) which currently includes data attributes from the following systems and data files: Case Recordation (CR), ORCA, Mining Claim Recordation (MCR), Alaska Automated Land Records System (AALRS), Master Name Status, Legal Land Description (LLD), and Bond and Surety. The model depicts major data classes, attributes (data elements) contained within each entity, and relationships between entities.

The LDM was initially constructed using Oracle Modeling techniques in September 1988. Through many user reviews, modifications, and additions, the model has evolved into a Bureau-styled design. The model is currently being loaded to the McDonnell Douglas ProKit Workbench CASE Tool for standardization and distribution purposes. The LDM includes a support data or attribute dictionary that crosswalks the model attributes to data elements in the Bureau's Data Element Dictionary (DED).

A. Assumptions-

- The Lands and Mineral Records Logical Data Model is the base building block that establishes the baseline for a Bureau Corporate data model that will include Geographic Coordinates Data Bases (GCDB), Automated Resource Data (ARD), Resource Base Data (RBD), Administrative Services Data, and Technical Services Data.

- This Logical Data Model will provide the baseline for the Target System data relationship requirements.

B. Policy Considerations-

- Policy must be obtained to establish the Lands and Mineral LDM as the Bureau's baseline and what other data components, i.e., Resources, Administration, and Technical services will be integrated or interfaced.

3.5 Solid Leasable Minerals System (SLMSII) Data Modeling

Task Manager: Joe Rasmussen SC-325

This model involves the entities and attributes associated with the redesigning of the SLMS data bases.

A. Assumptions-

- The SLMS II logical data model will depict the new solid leasable data requirements in advance of the development of the physical data base.

- The SLMS II logical data model will be integrated into the Corporate Logical Data Model.

B. Policy Considerations-

- There is no written policy that establishes the Service Center as the developer and manager of the SLMS II LDM.

3.6 Resource Base Data Modeling

Task Manager: Mike Hutt SC-670

This effort will show the "hooks" between the RBD information and ARD. The USGS has completed a logical data model for its Digital Line Graph-Enhanced (DLG-E). The Bureau will review this model for its applicability and possible adoption as the RBD LDM.

A. Assumptions-

- RBD will contain the following data sets: terrain, hydrography, transportation, and cultural infrastructure.
- The USGS will cooperate fully with the Bureau with possible revisions to the DLG-E design. The Interim and Target System will provide capabilities necessary to implement RBD requirements.
- The USGS logical data model can be modified and incorporated in the Bureau's corporate Logical Data Model.

B. Policy Considerations-

- To be determined.

3.7 Automated Resource Data Modeling

Task Manager: Don Oakland SC-323

This logical data model involves the entities and attributes associated with data identified during the Resources Data Set process.

A. Assumptions-

- This LDM would be developed by the Service Center (SC-323) as each Resource Data Set Team completes final lists of attributes. Modeling would be performed as additions or interfaces to the current Lands and Minerals (Corporate) LDM.

B. Policy Considerations-

- There is no written policy specifying that the Service Center has the authority to develop Resources LDMs, merge with the ALMRS LDM, and manage the Corporate products.

3.8 AIRS/MRO Data Modeling

To be determined.

3.9 LIS Oil and Gas Data Modeling

To be determined.

Task Title: 3.1 Interim Release 1 Data Model

Task Manager: Jerry Carlander SC-344

Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
3.1.1	Develop Guidance	J. Carlander, SC-344	J.Strong, J.Moeller	12/1/89	6/1/90	Technology Task 7.1	F.C. Presentation	Approved	
3.1.2	Develop LDM for Interim Rel. 1	J. Carlander, SC-344	B.Ader, S.Akins	7/17/89	8/17/89	Technology Task 7.1	Draft LDM	Review & Acceptance	AALRS, CR/ORCA,MCR,Limited LLD
3.1.3	Finalize Rel. 1 LDM	J. Carlander, SC-344	B.Ader, S.Akins	10/16/89	2/1/90	Technology Task 7.1	Final LDM	Final Review & Acceptance	
3.1.4	Cross-walk Interim Rel.1 & Incorporate	J. Carlander, SC-344	D.Oakland, J.Carlander	2/1/90	3/1/90	Data Task 3.4	Cross-walk Documentation	Certified by D.Oakland and J.Carlander	

Task Title: 3.2 Interim Release 2 Data Model

April, 1990

Task Manager: Don Oakland SC-323

Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
3.2.1	Develop Guidance	J.Carlander, SC-344	B.Leopold, J.Moeller	2/1/90	3/1/90	Technology Task 7.2	Presentation to F.C.	F.C. Approved	
3.2.2	Develop Interim Rel. 2 LDM	D.Oakland, SC-323	J.Carlander, M.Thompson	3/1/90	9/1/90	Technology Task 7.2	Draft LDM	Review certification by J.Carlander	
3.2.3	Complete Rel 2 LDM	D.Oakland, SC-323	J.Carlander, M.Thompson	9/1/90	11/1/90	Technology Task 7.2	Final Rel 2 LDM	Certification by D.Oakland	
3.2.4	Cross-walk Rel 2 & Corporate LDM	D.Oakland, SC-323	J.Carlander, M.Thompson	11/l/90	1/1/91	Data Task 3.4, 6.1	Cross-walk Documentation	Certification by D.Oakland	

Task Title: 3.3 GCDB Logical Data Model

Task Manager: Keith Hedlund SC-326

Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
3.3.1	Developing & Guidance	M.Myers-Chapman, SC-326	B.Leopold, J.Moeller	12/1/89	3/1/90		Policy	Approved by WO-700	
3.3.2	GCDB Data Collection, LDM Development	K.Hedlund, SC-326	M.Myers-Chapman, G.Oviatt	9/1/89	12/15/89	Data Task 5.3	Draft LDM	Review by NM-930	
3.3.3	Re-draft of LDM	K.Hedlund, SC-326	M.Myers-Chapman	2/1/88	1/1/89		Re-draft LDM Review	Certification by K.Hedlund	
3.3.4	Final Review of GCDB LDM	K.Hedlund, SC-326	M.Myers-Chapman, G.Oviatt	12/1/89	1/12/90		Final LDM	Certification by K.Hedlund and G.Oviatt	
3.3.5	Crosswalk GCDB to L&M LDM	K.Hedlund, SC-326	M. Thompson, D.Oakland	1/15/90	3/12/90	Data Task 3.4	Crosswalk Documentation	Certification by D.Oakland	
3.3.6	Prototype Draft Physical Data Model	K.Hedlund, SC-326	M. Myers-Chapman	3/5/90	4/13/90	Data Task 6.1	Physical Model Draft	Certification by K.Hedlund	
3.3.7	Final GCDB Physical Implementation and Integration of LDM to Corporate LDM	K.Hedlund, SC-326	M. Myers-Chapman	3/5/90	4/13/90		Physical Design	Certification by K.Hedlund and G.Oviatt	

Task Manager: Don Oakland SC-323

Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
3.4.1	Develop Policy and Guidance	D.Oakland, SC-323	B.Leopold, J.Moeller	12/1/89	3/1/90		Policy	Approved by WO-700	
3.4.2	Conduct LDM Training for Target Model Development	M.Thompson, SC-322		8/17/88	8/25/88		Oracle course	PO Approved by B.Bernard	
3.4.3	Complete L&M LDM Draft	M.Thompson, SC-322	B.Moeller, T.Laird, T.Adler, L.Precosky, D.Burkholder	8/28/88	9/9/88	Data Tasks 4.1-4.6	Draft LDM	Review certification by M. Thompson	
3.4.4	Nevada Review of MCR	M.Thompson, SC-322	O.Weimer, C.McCauley, K.Knutson	12/16/88	1/5/89	Data Task 4.4	Documentation of MCR Requests	Certification by M. Thompson	
3.4.5	2nd Draft of L&M LDM	M.Thompson, SC-322	G.Gonzales	1/5/89	1/9/89	Data Tasks 4.1-4.6	Re-draft, MCR Enhancements	Certification by M. Thompson	
3.4.6	Alaska Interim Development Review	M.Thompson, SC-322	M.Thompson, B.Moeller	2/1/89	3/31/89	TGS	Draft LDM Analysis	Target Model is determined to be outside AK scope	

Task Title: 3.4 Lands and Minerals

Task Manager: Don Oakland SC-323

Step Order	Action Steps	Responsible People	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
3.4.7	3rd Draft of L&M LDM	M.Thompson, SC-322	R.Gonzales	3/31/89	4/19/89	Data Tasks 4.1-4.6	LDM	Certification by M. Thompson	
3.4.8	2nd Alaska User Review	M.Thompson, SC-322	V.Crosby, B.Moeller, P.Skoog, L.Brigs	6/8/89	8/30/89		Draft AK LDM	Certification by B. Moeller	
3.4.9	4th Draft of L&M LDM	M.Thompson, SC-322	V.Crosby, N.Reitsma	7/15/89	8/25/89	Data Tasks 4.1, 4.8	Re-draft LDM	Certification by M. Thompson	
3.4.10	Case Tool Procurement	V.Crosby, SC-323	J.Ulich, B.Ajo	8/1/89	8/30/89		Case Tool Criteria	Approved by B. Bernard	
3.4.11	Case Tool Training	V.Crosby, SC-323	N. Reitsma	9/24/89	9/27/89		Requisition	Approved by B. Bernard	
3.4.12	Crosswalk to GCDB LDM	D.Oakland, SC-323	K.Hedlund	12/1/89	3/1/90	Data Tasks 3.3, 4.12	Documentation	Certification by D. Oakland and K.Hedlund	
3.4.13	Complete Final Review of L&M LDM	D.Oakland, SC-323	M.Thompson, K.Hedlund	2/1/90	5/1/90	Data Tasks 4.1-4.8, 6.1; Target 2.0	LDM Re-Draft	Certification by D. Oakland	

Task Title: 3.4 Lands and Minerals April, 1990

Task Manager: Don Oakland SC-323

Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
3.4.14	Crosswalk to EDM	D.Oakland, SC-323	J.VanWyhe	2/1/90	3/1/90	Data Task 2.0	Report	Report Accepted by J. VanWyhe	
3.4.15	Include SLMS II	D.Oakland, SC-323	J.Rasmussen	2/15/90	3/31/90	Data Tasks 3.5, 4.11, 6.1; Target 2.0	Re-draft of LDM	Certification by J. Rasmussen	
3.4.16	Include Resources Data Sets	D.Oakland, SC-323	J.VanWyhe	3/1/90	6/1/91	Data Tasks 3.7, 4.9, 6.1; Target 2.0	Re-draft of LDM	Certification by J. VanWyhe	
3.4.17	Include Resource Base Data	D.Oakland, SC-323	M.Hutt	6/1/90	6/1/91	Data Tasks 3.6, 4.13, 6.1; Target 2.0	Re-draft of LDM	Certification by M.Hutt	
3.4.18	Include AIRS/MRO Data	D.Oakland, SC-323	J.Evans	6/1/90	6/1/91	Data Tasks 3.8, 4.10, 6.1; Target 2.0	Re-draft of LDM	Certification by J.Evans	
3.4.19	Include OIG Interim Data	D.Oakland, SC-323	T.Foley	5/1/90	1/1/91	Data Task 3.9, 6.1; Target 2.0	Re-draft of LDM	Certification by T.Foley	

Task Title: 3.5 SLMS II Data Model

April, 1990

Task Manager: J. Rasmussen SC-325

Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
3.5.1	Develop Guidance	J.Rasmussen, SC-325	B.Leopold, J.Moeller	12/1/89	2/l/90		Guidance	Approved	
3.5.2	Check of Cross-walk of SLMS to L&M LDM	J.Rasmussen, SC-325	D.Oakland, M.Thompson	2/15/90	3/15/90	Data Task 3.4.15	Re-draft of LDM	Certification by J. Rasmussen	

Task Title: 3.6 Resource Base Data Modeling

April, 1990

Task Manager: M.Hutt SC-670

Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
3.6.1	Obtain USGS DLG-E LDM Review	M.Hutt, SC-670	F.Batson, J.VanWyhe	11/1/89	3/1/90		DLG-E LDM Documentation	WO-700 Acceptance	
3.6.2	Incorporation DLG-E and RBD in L&M LDM	D.Oakland, SC-323	M.Hutt, F.Batson, J.VanWyhe	6/1/90	6/1/91	Data Tasks 3.4, 4.13	RBD LDM	Certification by M.Hutt	
3.6.3	Link RBD, GCDB & ARD LDMs	D.Oakland, SC-323	M.Hutt, F.Batson, M.Thompson	3/1/91	9/1/92	Data Tasks 3.3, 3.4, 3.7, 4.13	Re-draft of L&M LDM	Certification by D. Oakland and J.VanWyhe	

Task Title: 3.7 Automated Resource Data Modeling

Task Manager: D.Oakland, SC-323

Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
3.7.1	Developing Policy and Guidance	J.VanWyhe, WO-704	B.Leopold, J.Moeller	2/1/90	3/1/90		Policy	Approved by F.C.	
3.7.2	Develop LDM for Resource Data Sets	D.Oakland, SC-323	J.VanWyhe, J.Collins	6/1/90	6/1/91	Data Tasks 3.4, 4.9	Draft LDM	Certification by J. VanWyhe	
3.7.3	Crosswalk to L&M LDM	D.Oakland, SC-323	M.Thompson, J.Collins	6/1/90	6/1/91		Re-draft L&M LDM	Certification by D. Oakland	

Task Title: 3.8 AIRS/MRO Data Model

Task Manager: TBD

Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks

PLACEHOLDER

Task Title: 3.9 LIS Oil and Gas LDM

Task Manager: TBD

Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks

PLACEHOLDER

4 Existing and Proposed Data Standards

This activity involves the identification and designation of data that will be standardized as Bureau corporate data in the Life Cycle system developments. Data are defined as that collected and maintained on manual or paper medium as well as on automated systems. Corporate data is defined as data that is needed for national reporting purposes whether as text or graphics and data that would be shared or exchanged between States or other governmental entities. (See Resources Data Standards Handbook for further definition detail.) Standards will be applied to existing systems and data files that meet the Corporate data criteria. Systems or data files that meet this criteria, include the following: Case Recordation, ORCA, Mining Claim Recordation, AALRS, GCDB, Master Name, Bond and Surety, Status, Legal Land Description (LLD), Automated Resource Data (ARD), Resource Base Data (RBD), SLMS, AIRS, MRO, Administrative Data, etc.

Manual data and information will be discussed in the Records Transition Planning, Activity 8.1 of this Tactical Plan.

A. Assumptions-

- o Data standards developed and used in existing systems, Interim developments, and Target System designing will be convertible to a Corporate Bureau data standard. Since data standards are in a state of continual change, baselines will be documented using existing, Interim, and Target Systems data dictionaries.
- o DED will serve as standards document.

B. Policy Considerations-

- o Policy must be promulgated to identify the Service Center as the technical manager of corporate data standards. Bureau managers and system analysts must be accountable, via policy, for complying with current data standards, especially in the areas of new system design and development.

4.1 Lands Data Standards - Case Recordation/ORCA

Task Manager: Annette Jameson WO-310

This task involves the development and implementation of corporate data standards that support the automated lands programs such as right-of-ways, exchanges, withdrawals, classifications, sales, acquisitions, leases, and permits, etc. The standards are issued through the Washington Office Program Leader, with Field Office Review and Bureau Data Administrator approval.

A. Assumptions-

- o The DED will be used to document the Standards.
- o Lands data standards for the CR/ORCA current system will be issued in February 1990, integrated into the Interim System developments, and be converted to the Corporate standard to be applied in the Target System design. Lands standards will be coordinated with Mineral standard needs.

- These standards must conform to overall Bureau standards for Land and Minerals Records Data.

B. Policy Considerations-

- Policy must be written to establish WO program leaders as the data standards developers and implementers.

4.2 Mineral Fluids Data Standards - Case Recordation/ORCA

Task Manager: Tim Foley WO-610

This task involves the Fluids Mineral Program data standards established by the Washington Office Program Leader for the Case Recordation/ORCA Systems. The standards are issued through the Washington Office Program Leader, with Field Office Review and Bureau Data Administrator approval.

A. Assumptions-

- The DED will be used to document the Standards.
- Fluid Mineral Data Standards will be completed by February 1990. Minerals Data Standards will be crosswalked to other programs; i.e., lands solids, and saleables.
- These Standards must conform to overall Bureau Standards for Land and Minerals Records Data.

B. Policy Considerations-

- No written policy is in place that identifies the Washington Office Program Leader as the responsible party for developing and implementing fluid mineral data standards.

4.3 Mineral Solids and Saleable Data Standards - Case Recordation/ORCA

Task Manager: Jim Horan WO-640

This task involves the Solids and Saleable Mineral Program data standards established by the Washington Office Program Leader for the Case Recordation/ORCA Systems. The standards are issued through the Washington Office Program Leader, with Field Office Review and Bureau Data Administrator approval.

A. Assumptions-

- The DED will be used to document the data standards.
- Solid and Saleable Mineral data standards will be completed by February 1990. Minerals data standards will be crosswalked to other programs; i.e., lands and fluids.

- These standards must conform to overall Bureau Land and Minerals Records Data Standards.

B. Policy Considerations-

- No written policy is in place that identifies the Washington Office Program Leader as the responsible party for developing and implementing solid and saleable minerals data standards.

4.4 Mining Claim Recordation (MCR) Data Standards

Task Manager: Bob Gibson WO-640

This tasks involves the identification and development of data standards that are being applied to or will be applied to the Mining Claim Recordation System. These standards are to be established by the Washington Office Program Leaders and approved by the Bureau Data Administrator. In addition, the interface to the Master Name System must also be investigated.

A. Assumptions-

- MCR Standards will be completed by February 1990. Data integration potential to CR/ORCA, Status, and LLD will be tested and completed in support of Interim and Target developments.
- These Standards must conform to overall Bureau Land and Minerals Records Data Standards.
- The DED will document the Data Standards.

B. Policy Considerations-

- No written policy is in place that identifies the Washington Office Program Leader as the responsible party for developing and implementing MCR data standards.

4.5 Legal Land Description (LLD) Data Standards

Task Manager: Tom Adler SC-322

The LLD data file is one of the base building blocks for the Target System development. It contains the Master Title Plat (MTP) and survey plat information that describes legal land parcels and special surveys, such as mineral surveys, tracts, and lots, etc. It will be used to establish the parcel location standards for all other legal descriptions contained in other case processing data bases and systems, e.g., Case Recordation/ORCA, MCR, and Status. LLD collection standards are provided under guidance from the Service Center.

A. Assumptions-

- LLD is one of the major building blocks for the Target System, with application potential for Interim development.

- o LLD is complimentary to the GCDB, providing land unit/parcel attributes, i.e., access, surface administration, political unit, etc.

B. Policy Considerations-

- o No written policy is in place that identifies the Service Center (SC-320) as the authorized responsible party for development and management of LLD data standards.

4.6 Status Data Standards

Task Manager: Mike Thompson SC-322

The status data file also makes up one of the base building blocks of the Target System. It contains the land and mineral ownership data that describes in the Control Document Index, Master Title Plat, and Historical Index. The Service Center is responsible for the implementation and deployment of standards through a dictionary management process in support of private contract and in-house data collection activities that require immediate data standards support.

A. Assumptions-

- o Status is one of the base building blocks for the Target System, with application potential for Interim development. It will be used as the format and data relationships for the case processing functions of the new systems.

B. Policy Considerations-

- o No written policy is in place that identifies the Service Center SC-320 as the authorized responsible party for development and management of Status data standards.

4.7 Master Name Data Standards

Task Manager: Ken Knutson SC-324

Master Name is a current centralized data file supporting the Bond and Surety System. The Master Name file is a mandatory interface to the Target System. A Name Identification (ID) process establishes a number for a unique customer with multiple names and addresses. The Service Center is currently evaluating the data standards issues associated with the development of a National Master Name data file.

A. Assumptions-

- o The Master Name file will be accessed by all applications of the Target System where customer name will be used such as Case Processing, SLMS, GABS, Billing and Rentals, and Bond and Surety, etc.
- o The Master Name file has the potential for inclusion to the Interim development and must include the Bond and Surety File System.

B. Policy Considerations-

- Policy must be promulgated to establish a national Master Name System in support of Interim and Target developments.

4.8 Bond and Surety Data Standards

Task Manager: Ken Knutson SC-324

This system primarily supports the Bureau's Oil and Gas Leasing processes in Case Recordation/ORCA, but has the capability to support any other land or mineral case processing bond requirements. Data standards are currently being evaluated by the Service Center.

A. Assumptions-

- The Bond and Surety System will be a mandatory data base or file interface of the Target System.
- The Bond and Surety System has the potential for inclusion in the Interim development and must include the Master Name file.

B. Policy Considerations-

- Policy must be promulgated to establish the Bond and Surety File as a mandatory interface to both Interim and Target System developments.

4.9 Automated Resource Data Standards (ARD)

Task Manager: Janis VanWyhe WO-704

Resources management data standards are being developed by Data Set Standardization teams led by the individual states. The process will span FY 89-90. There are 29 data set assignments, split into three rounds in order to spread the work over time. Teams have been put together to represent user's data needs. There are several FY 89 I.M.s out on this activity.

Round one of the resources Data Set Standardization Project began in mid FY 89 after somewhat of a slow start. Round one will be coming to a close in third quarter FY 90. In round two, four states are responsible for data set teams. Round three consists of fourteen new data set assignments led by the states, starting in November 1989, lasting through late FY 90. The corporate data elements will be initially approved by the Bureau Data Administrator and delivered to the Service Center Branch of Logical Data Modeling and to the Spatial Cartographic Standards Team respectively for incorporation into the Target System logical data model and for development of spatial input and display standards.

A. Assumptions-

- The State Directors support this effort as a high priority and will approve the travel of their States' team members. A fund of money estimated to cover such travel was set aside in each state.

- There is a dependency between this and the symbology library. This is a source of information for the Symbology Library (SC-670).
- The corporate data elements developed by the teams are given to SC Branch of Data Modeling to add to the Corporate Logical Data Model.

B. Policy Considerations-

- This effort is directed by several FY WO 89-I.M.s giving schedules and team leaders, and WO IM 90-204 dated 12-21-89 which transmits the Resources Data Standardization Handbook.
- Policy must be developed to ensure that Resources automated activities follow alphanumeric and spatial data standards, as approved by the Bureau Data Administrator.

4.10 AIRS and MRO Data Standards

Task Manager: John Evans SC-325

These two PC field support systems are maintained in the Service Center Branch of Resources (SC-325) and are being considered for redevelopment through direction from the Washington Office. These programs support fluids operations and will be evaluated against newly identified fluids data standards.

A. Assumptions-

- AIRS and MRO data will be integrated into the Target System data base.

B. Policy Considerations-

- IM No. 89-432 assigns the task of identifying data standards for all Fluid Minerals activities, including the AIRS and MRO systems to four Fluid Minerals LIS Requirements teams under the direction of the Branch of Minerals Information (WO-613). This effort is designed to compliment the standardization effort instituted by the Bureau's Data Administrator. IM No. 89-344 assigns responsibility to the AIRS/MRO user group to make recommendations on the use of existing AIRS and MRO data elements to WO-613 for that office's approval and transmittal to the Service Center for implementation. Various instruction memoranda promulgated by WO-617 have established certain data standards for AIRS and MRO. WO-613 in concert with the Bureau's Data Administration process will continue to be responsible for establishing data standards for these systems.

4.11 SLMS II Data Standards

Task Manager: Joe Rasmussen SC-325

This PC field support system for solid leasable minerals program has been redeveloped by field and WO representatives and the Service Center (SC-325). The new platform involves PC Oracle/Prime Oracle 5.1.22 and has been distributed to the States in early 1990.

A. Assumptions-

- SLMS data will be integrated into the Target System data base.

B. Policy Considerations-

- No written policy exists to identify the party responsible for developing data standards or providing guidance for integration of SLMS II.

4.12 GCDB Data Standards

Task Manager: Keith Hedlund SC-326

The GCDB will be created as a result of a Bureauwide effort beginning with a data collection data base. It will consist of the survey coordinates that will contribute to the Target System data base building blocks. Data standards are being identified through the development of the GCDB data collection logical model. The Service Center is administering the collection contracts and processes, the development of a logical data model and the identification of GCDB data standards. Data will conform to existing standards and coordinated with the Forest Service, National Geodetic Survey, and Geological Survey.

A. Assumptions-

- GCDB is a major building block in the Target System with Interim application potential, providing survey coordinates to assist in the development of graphical products, such as status plats, use plats, etc.

B. Policy Considerations-

- No written policy exists to identify the party responsible for developing GCDB data standards.

4.13 Resources Base Data Standards

Task Manager: Mike Hutt SC-670

The Bureau will use the standards developed and adopted by the Federal Interagency Coordinating Committee for Digital Cartography (FICCDC) as the building block for the Bureau RBD data standardization effort. The Bureau's policies for RBD will include the arrangements being adopted by the BLM, Forest Service and Geological Survey through the three-way Interagency Agreement of November 1988. The Bureau's LIS concept will be instrumental in the adoption of these standards and the improvement of the value of the resource and records information.

A. Assumptions-

- Bureau contractors and field offices will comply with standard attribute schemes.
- RBD will contain the following data sets: terrain, hydrography, transportation, and cultural infrastructure.

- o BLM will evaluate USGS Digital Line Graph-3 (DLG-3) Standards and adopt.

B. Policy Considerations-

- o No written policy exists to identify the party responsible for developing RBD standards.

4.14 Administrative Data Standards

To be determined.

4.15 State Specific Data Standards

To be determined.

Task Title: 4.1 Lands Data Standards - CR/ORCA

Task Manager: A. Jameson WO-310

Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
4.1.1	Develop Guidance	A.Jameson, WO-310	J.Moeller	12/1/89	2/1/90		Policy	Approved by WO-700	
4.1.2	Identify CR-Lands Data Standards	A.Jameson, WO-310	ALMRS Coordinators	10/1/89	2/28/90		Draft Data Standards	Certification by A. Jameson	
4.1.3	Initiate Crosswalk to Interim Rel. I Data Standards	A.Jameson, WO-310	P.Moreno, M.Thompson	11/14/89	11/17/89		Cross-walk Documentation	Certification by A. Jameson	
4.1.4	Complete CR - Lands Data Standards	A.Jameson, WO-310		2/1/90	3/1/90	Data Tasks 3.4, 9.0	Final Standard	Approved by WO-700	
4.1.5	Develop Action Code Conversion Standards	M.Thompson, SC-322	A.Jameson, ALMRS Coordinators	12/1/89	4/1/90	Technology Task 7.1	Draft Action Code Matrix	Review by ALMRS Coordinators	
4.1.6	Complete Action Code Conversion Matrix	M.Thompson, SC-322	A.Jameson, ALMRS Coordinators	4/2/90	6/1/90	Technology Task 7.1	Final Matrix	Approval by WO-310	
4.1.7	Conduct FIPSPUB Review	A.Jameson, WO-310	J.VanWyhe	6/1/90	8/1/90		Draft FIPSPUB	Certification by J. VanWyhe	
4.1.8	Draft FIPSPUB Standards	A.Jameson, WO-310	J.VanWyhe	8/1/90	10/1/90		Draft Standards	Approval by WO-700	

Task Title: 4.2 Mineral Fluids Data Standards - CR/ORCA

Task Manager: T. Foley WO-610

Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
4.2.1	Develop Policy & Guidance	T.Foley, WO-610	J.Moeller	12/1/89	2/1/90		Policy	Approval by WO-700	
4.2.2	Identify CR-Mineral Fluids Data Stds.	T.Foley, WO-610	ALMRS Coordinators	10/1/89	2/28/90		Draft Standards	Certification by T.Foley	
4.2.3	Initiate Crosswalk to Interim Rel. I	T.Foley, WO-610	J. Douglas, P.Moreno	11/14/89	11/17/89		Cross-walk Documentation	Certification by T.Foley	
4.2.4	Complete CR - Mineral Fluids Data Stds.	T.Foley, WO-610	ALMRS Coordinators	2/1/90	3/1/90	Data Tasks 3.4, 3.9, 9.0	Final Standards	Approval by WO-700	
4.2.5	Develop Action Code Conversion Standards	M.Thompson, SC-322	ALMRS Coordinators	12/1/89	4/1/90	Technology Task 7.1, 7.2	Draft Action Code Matrix	Review by ALMRS Coordinators	
4.2.6	Complete Action Code Conversion Matrix	M.Thompson, SC-322		4/2/90	6/1/90	Technology Task 7.1, 7.2	Final Matrix	Approval by WO-610	
4.2.7	Conduct FIPSPUB Review	T.Foley, WO-610	J.VanWyhe	6/1/90	8/1/90		Draft FIPSPUB	Approval by J.VanWyhe	
4.2.8	Draft FIPSPUB Standards	T.Foley, WO-610	J.VanWyhe	8/1/90	10/1/0		Draft Standards	Approval by WO-700	

Task Title: 4.3 Minerals Solids and Saleable Data Standards - CR/ORCA

Task Manager: J. Horan WO-640

Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
4.3.1	Develop Policy & Guidance	J.Horan, WO-640	J.Moeller	12/1/89	2/1/89		Policy	Approved by WO-700	
4.3.2	Identify CR-Mineral Solids and Saleable Data Standards	J.Horan, WO-640	ALMRS Coordinators	10/1/89	2/28/90		Draft Standards	Certification by J.Horan	
4.3.3	Initiate Crosswalk to Interim Rel. I	J.Horan, WO-640	P.Moreno	11/14/89	11/17/89		Cross-walk Demonstration	Certification by J.Horan	
4.3.4	Complete CR-Mineral Solids and Saleable Data Standards	J.Horan, WO-640	ALMRS Coordinators	2/1/90	3/1/90	Data Tasks 3.4, 9.0	Final Standards	Approval by WO-700	
4.3.5	Develop Action Code Conversion Standards	M.Thompson, SC-322	ALMRS Coordinators	12/1/89	4/1/90	Technology Task 7.1, 7.2	Draft Action Code Matrix	Review by ALMRS Coordinators	
4.3.6	Complete Action Code Conversion Matrix	M.Thompson, SC-322		4/2/90	6/1/90	Technology Task 7.1, 7.2	Final Matrix	Approval	
4.3.7	Conduct FIPSPUB Review	J.Horan, WO-640	J.VanWyhe	6/1/90	8/1/90		Draft FIPSPUB	Approval by J.VanWyhe	
4.3.8	Draft FIPSPUB Standards	J.Horan, WO-640	J.VanWyhe	8/1/90	10/1/90		Draft Standards	Approval by WO-700	

Task Title: 4.4 MCR Data Standards

April, 1990

Task Manager: B. Gibson WO-640

Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
4.4.1	Develop Policy & Guidance	B.Gibson, WO-640	J.Moeller	12/1/89	2/1/90		Policy	Approved by WO-700	
4.4.2	Identify MCR Data Standards	B.Gibson, WO-640	C.McCauley, ALMRS Coordinators	10/1/89	2/1/90		Draft Data Standards	Certification by B.Gibson	
4.4.3	Initiate Crosswalk to Interim Rel. I	B.Gibson, WO-640	P.Moreno	11/14/89	11/17/89		Cross-walk Documentation	Certification by B.Gibson	
4.4.4	Complete MCR Data Standards	B.Gibson, WO-640	C.McCauley, ALMRS Coordinators	2/1/90	3/1/90	Data Tasks 3.4, 9.0	Final Standards	Approval by WO-700	
4.4.5	Develop Action Code Conversion Standards	M.Thompson, SC-322	C.McCauley, ALMRS Coordinators	12/1/89	4/1/90	Technology Task 7.1, 7.2	Draft Action Code Matrix	Review by ALMRS Coordinators	
4.4.6	Complete Action Code Conversion Matrix	M.Thompson, SC-322	C.McCauley	4/2/90	6/1/90	Technology Task 7.1, 7.2	Final Matrix	Approval by WO-640	
4.4.7	Conduct FIPSPUB Review	B.Gibson, WO-640	C.McCauley, J.VanWyhe	6/1/90	8/1/90		Draft FIPSPUB	Approval by J.VanWyhe	
4.4.8	Draft FIPSPUB Standards	B.Gibson, WO-640	C.McCauley, J.VanWyhe	8/1/90	10/1/90		Draft Standards	Approval by WO-700	

Task Title: 4.5 LLD Data Standards

April, 1990

Task Manager: T. Adler SC-322

Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
4.5.1	Develop Policy & Guidance	T.Adler, SC-322		12/1/89	2/1/90		Policy	Approved by WO-700	
4.5.2	Develop LLD Edit Standards on Prime/Primix	T.Adler, SC-322		9/1/87	2/1/88		Draft Standards	Test successful by NM	
4.5.3	Issue LLD Edits, Rel. I	T.Adler, SC-322		9/1/88	9/6/88	Data Tasks 4.6, 9.0	Release	Successful by NM	
4.5.4	Issue LLD Edits, Rel. 2	T.Adler, SC-322		3/1/89	3/6/89	Data Tasks 4.6, 9.0	Release	Successful by NM, MT, WY, NV, UT, ID	
4.5.5	Issue LLD Edits, Rel. 3	T.Adler, SC-322		10/10/89	10/15/89	Data Tasks 4.6, 9.0	Release	Successful by NM, MT, WY, NV, UT, ID	
4.5.6	Complete LLD Data Standards	T.Adler, SC-322		2/1/90	1/1/91	Data Tasks 3.4, 4.6, 5.1, 9.0; Technology Tasks 7.1, 7.2	Final Data Standards	Approval by WO-700	
4.5.7	Conduct FIPSPUB Review	T.Adler, SC-322	J.VanWyhe	1/1/91	3/1/91		Draft FIPSPUB	Approval by J.VanWyhe	
4.5.8	Draft FIPSPUB Standards	T.Adler, SC-322	J.VanWyhe	3/1/91	5/1/91		Draft Standards	Approval by WO-700	

Task Title: 4.6 Status Data Standards

Task Manager: M.Thompson SC-322

Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
4.6.1	Develop Policy & Guidance	M.Thompson, SC-322	J.Moeller	12/1/89	2/1/90		Policy	Approved by WO-700	
4.6.2	Develop Status Edit Standards on Prime/Primix	T.Adler, SC-322	M.Thompson	9/1/87	2/1/88		Draft Standards	Successful by NM	
4.6.3	Issue Status Edits Rel. I	T.Adler, SC-322		9/1/88	9/6/99	Data Tasks 4.5, 5.2, 9.0	Release	Successful by NM	
4.6.4	Issue Status Edits Rel. 2	T.Adler, SC-322		3/1/89	3/6/89	Data Tasks 4.5, 5.2, 9.0	Release	Successful by NM, MT, WY, UT, NV, ID	
4.6.5	Issue Status Edits Rel. 3	T.Adler, SC-322		10/10/89	10/15/89	Data Tasks 4.5, 5.2, 9.0	Release	Successful by NM, MT, WY, UT, NV, ID	
4.6.6	Issue New Handbook, Withdrawals	M.Thompson, SC-322		12/1/89	2/15/90	Data Task 5.2	Handbook	Distribution to SDs	
4.6.7	Complete Status Data Standards	M.Thompson, SC-322		2/1/90	12/30/91	Data Tasks 3.4, 4.5, 5.2, 9.0; Technology Task 7.2	Final Data Standards	Approval by WO-700	
4.6.8	Conduct FIPSPUB Review	M.Thompson, SC-322	J.VanWyhe	12/30/91	2/1/92		Draft FIPSPUB	Approval by J.VanWyhe	
4.6.9	Draft FIPSPUB Standards	M.Thompson, SC-322	J.VanWyhe	2/1/92	4/1/92		Draft Standards	Approval by WO-700	
4.6.10	Update 1275 Manual	Canfield	Thompson	3/90	9/90		New Manual	Approval by WO-770	

Task Title: 4.7 Master Name Data Standards

Task Manager: K. Knutson SC-324

Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
4.7.1	Develop Policy & Guidance	K.Knutson, SC-324	R.Molinar, J.Moeller	12/1/89	2/1/90		Policy	Approved by WO-700	
4.7.2	Identify Master Name Data Standards and Requirements	K.Knutson, SC-324	ALMRS Coordinators	12/1/89	3/1/90		Draft Standards	Review by ALMRS Coordinators	
4.7.3	Complete Master Name Data Standards	K.Knutson, SC-324	ALMRS Coordinators	3/2/90	6/30/90	Data Task 3.4; Technology Tasks 7.2	Final Standards	Approval by WO-700	
4.7.4	Conduct FIPSPUB Review	K.Knutson, SC-324	J.VanWyhe	6/30/90	8/30/90		Draft FIPSPUB	Approval by J.VanWyhe	
4.7.5	Draft FIPSPUB Standards	K.Knutson, SC-324	J.VanWyhe	8/30/90	10/30/90		Draft Standards	Approval by WO-700	

Task Title: 4.8 Bond and Surety Data Standards

Task Manager: K. Knutson SC-324

Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
4.8.1	Develop Policy & Guidance	K.Knutson, SC-324	R.Molinar, J.Moeller	12/1/89	2/1/90		Policy	Approved by WO-700	
4.8.2	Develop Bond & Surety Data Needs Analysis	K.Knutson, SC-324	ALMRS Coordinators	12/1/89	2/28/90		Questionnaire	Returned by SDs	
4.8.3	State Evaluation Received	K.Knutson, SC-324		3/1/90	6/30/90		Evaluation Forms	Analysis by SC-320	
4.8.4	Draft New Bond & Surety Data Standards	K.Knutson, SC-324	ALMRS Coordinators	7/1/90	9/30/90	Data Task 3.4; Technology Tasks 7.2	Final Data Standards	Approval by WO-700	
4.8.5	Conduct FIPSPUB Review	K.Knutson, SC-324	J.VanWyhe	9/30/90	11/30/90		Draft FIPSPUB	Approval by J.VanWyhe	
4.8.6	Draft FIPSPUB Standards	K.Knutson, SC-324	J.VanWyhe	11/30/90	1/30/90			Approval by WO-700	

Task Title: 4.9 Automated Resource Data Standards

April, 1990

Task Manager: J. VanWhye WO-704

Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
4.9.1	Develop Policy and Guidance	J.VanWyhe, WO-704	J.Moeller	12/1/89	2/1/90		Policy	Approved by WO-700	
4.9.2	Initiate Data Standards Identification Process	J.VanWyhe, WO-704		1/12/88	1/6/88		Draft Handbook	Field Committee Approval	
4.9.3	Complete Final Data Set Report to ADDA	ASDs	Data Set Team Leaders, SODAs	3/1/88	8/10/90	Data Tasks 3.4, 3.7, 5.6	Data Elements	Mail Final Report	
	Round 1 Group 1	ASDs	DSTLs, SODAs	3/1/88	12/27/89	"			
	Round 1 Group 2	ASDs	DSTLs, SODAs	3/1/88	1/12/90	"			
	Round 1 Group 3	ASDs	DSTLs, SODAs	3/1/88	2/9/90	"			
	Round 2	ASDs	DSTLs, SODAs	7/1/89	4/6/90	"			
	Round 3 Group 1	ASDs	DSTLs, SODAs	11/1/89	6/1/90	"			
	Round 3 Group 2	ASDs	DSTLs, SODAs	11/1/89	6/15/90	"			
	Round 3 Group 3	ASDs	DSTLs, SODAs	11/1/89	7/13/90	"			
4.9.4	BDA Approve DEs, Send to SC	J.VanWyhe, WO-704	ADDAs	12/22/89	8/10/90		Approved Data Elements	Sign-off and Send to SC	Data Sets will be as a model to SC
	Round 1 Group 1	J.VanWyhe, WO-704	ADDAs	12/22/89	1/19/90	Data Tasks 3.4, 3.7, 5.6			
	Round 1 Group 3	J.VanWyhe, WO-704	ADDAs	2/9/90	3/9/90	"			
	Round 2	J.VanWyhe, WO-704	ADDAs	4/6/90	5/4/90	"			

Task Title: 4.9 Automated Resource Data Standards

Task Manager: J. VanWhye WO-704

Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
	Round 3 Group 1	J.VanWyhe, WO-704	ADDAs	6/1/90	6/29/90	"			
	Round 3 Group 2	J.VanWyhe, WO-704	ADDAs	6/15/90	7/13/90	Data Tasks 3.4, 3.7, 5.6			
	Round 3 Group 3	J.VanWyhe, WO-704	ADDAs	7/13/90	8/10/90	"			

Task Title: 4.10 AIRS and MRO Data Standards

Task Manager: J. Evans SC-325

Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
4.10.1	Develop Policy & Guidance	T.Foley, WO-613	J.Moeller, J.Evans	12/1/89	2/1/90		Policy	Approved by WO-700	
4.10.2	Develop AIRS & MRO Data Standards	T.Foley, WO-613	J.Evans	3/5/90	6/15/90	Data Tasks 3.4, 3.8, 3.9	Draft Data Elements	Certification by T.Foley	
4.10.3	Crosswalk AIRS and MRO Standards with Fluids Data Standards	T.Foley, WO-613	J.Evans	6/18/90	7/13/90		Crosswalk Documentation	Certification by T.Foley	
4.10.4	Crosswalk AIRS & MRO Data Elements to DED	T.Foley, WO-613	J.Evans, M.Thompson	8/16/90	9/17/90		DED Update	Approved by SC-320	
4.10.5	Finalize AIRS & MRO Data Conv. Requirements to DED	J.Evans, SC-325	M.Thompson, T.Foley	7/16/90	8/17/90	Data Tasks 3.4, 3.8, 3.9; Technology Task 7.2	Conversion Requirements	Approval by WO-700	
4.10.6	Maintain Data Base to Accommodate Data Standards	J.Evans, SC-325	T.Foley				Data Base	Acceptance by WO-700	

Task Title: 4.11 SLMS II Data Standards

Task Manager: J. Rasmussen SC-325

Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
4.11.1	Develop Guidance	J.Rasmussen, SC-325	J.Baker, J. Moeller	12/1/89	2/1/90		Guidance	Approval	
4.11.2	Develop SLMS II Data Standards	J.Rasmussen, SC-325	J.Horan	3/5/90	6/15/90	Data Tasks 3.4, 3.5, 4.3	Draft Data Elements	Certification by J. Rasmussen	
4.11.3	Crosswalk SLMS II Data Elements to DED	J.Rasmussen, SC-325	J.Horan, M.Thompson	6/18/90	7/13/90	Data Tasks 3.4, 3.5	DED Update	Approval by SC-320	
4.11.4	Finalize SLMS II Data Conversion Requirements to DED	J.Rasmussen, SC-325	J.Horan, M.Thompson	7/16/90	8/17/90	Data Tasks 3.4, 3.5; Technology Tasks 7.2	Conversion Requirements	Approval by WO-700	

Task Title: 4.12 GCDB Data Standards

Task Manager: K.Hedlund SC-326

Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
4.12.1	Develop Policy & Guidance	K.Hedlund, SC-326	B.Leopold, M.Myers-Chapman, M.Moeller	l2/l/89	12/8/89		Policy	Approval by WO-700	
4.12.2	Develop GCDB/ALMRS Data Standards	K.Hedlund, SC-326	M.Myers-Chapman, M.Thompson, G.Oviatt	12/1/89	2/2/89	Data Tasks 3.5, 3.6	Documented Data Element Dictionary	Approval by SC-320	
4.12.3	Interagency Standards Coordination	K.Hedlund, SC-326	M.Myers-Chapman	12/1/89	4/2/89		Data Element Review	Approval by WO-700	

Task Title: 4.13 Resource Base Data Standards

Task Manager: M.Hutt SC-670

Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
4.13.1	Define RBD Elements	M.Hutt, SC-670	SCST	10/1/89	3/1/90		Draft RBD Attributes	Draft to F.O.'s	
4.13.2	Field Review	M.Hutt, SC-670	Program Leaders	3/1/90	5/1/90		RBD Attribute Requirements	Comments to SC-670	
4.13.3	FIPS Review	M.Hutt, SC-670	J.VanWyhe	4/1/90	9/1/90		Evaluation	Approval by J.VanWyhe	
4.13.4	RBD Metadata Requirements	M.Hutt, SC-670	SCSO	5/1/90	11/1/90		RBD Metadata Requirements	BDA Approval	
4.13.5	Finalize RBD Attributes	M.Hutt, SC-670	SCSO	5/1/90	11/1/90		RBD Elements	SC-320 Approval	
4.13.6	Develop Attribute Definitions	M.Hutt, SC-670	SCSO, D.Oakland	10/1/90	3/1/91		RBD Attributes	SC-320 Approval	
4.13.7	Propose Additional FIPS	M.Hutt, SC-670	SCSO, D.Oakland	3/1/91	10/1/91		Proposed FIPS	WO-700 Approval	

Task Title: 4.14 Admin Data Standards

Task Manager: Tom Allen WO-800

Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks

PLACEHOLDER

Task Title: 4.15 State Specific Data Standards

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Task Manager: SDAs

Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks

PLACEHOLDER

5 Data Collection Plans

This activity involves the collection of data under the formal guidance of Bureau approved plans that specify the standards by which the data is to be collected and the format it will follow. Plans must include explanations of the intended use or application of the data, handbook preparation for description of the process, data dictionary access and management, and schedule for training. These data collection plans will support the Bureau's Modernization effort. Most data collection efforts are Bureauwide initiatives, managed through a central point of contact, and funded through the AWP as in-house and/or contract data collection activities. Other collection plans may only address activities at State or District levels without specific funding outside the programs base.

A. Assumptions-

- Data collection plans and activities are performed using corporate data standards derived from or added to the Bureaus' Data Element Dictionary. Data collection plans are approved by the Field Committee or other recognized Bureau management entity. Data collections may be performed by Bureau personnel or by contract.
- These data collection plans do not apply to field inventory activities, i.e., range condition inventory.

B. Policy Considerations-

- Written policy and guidance is lacking in support of data collection planning and implementation.

5.1 Legal Land Description (LLD)

Task Manager: Tom Adler SC-322

This data file is one of the base building blocks of the Target System and represents the legal land information collected from the Master Title Plat and Survey Plats. For example, Lot 1, Section 1, Township 25 North, Range 46 East, Salt Lake Meridian, would be collected using specific codes from the Data Element Dictionary, Application 2002. Where a data element does not exist, one would be added to the DED. This data has been collected in-house on Honeywell Level 6s and is being maintained by each of the western states on the DPS8000. The data entry program was developed and is maintained by the Arizona State Office. Data standards and collection procedures are the responsibility of the Service Center (SC-320). Data editing is partially accommodated by the Match/Merge software which is referenced in Activity 9.0, Data/Information Integrity Planning Strategy. Manual inspections of the LLD data files have not been conducted according to a set of evaluation criteria. There are no documented quality levels for a particular states' LLD data. Such an analysis will be performed in the Data Integrity Plans Activity (9.0). LLD is intended to provide a high quality legal land description to be used in the Interim and Target Systems. Since it stores the legal land parcel, it can also effectively attach stipulations, lands and mineral availability, commodities, and their availability, and ownership information.

A. Assumptions-

- o Legal Land Description data is one of the Target System base building blocks that will describe legal land units, be used to validate land parcel locations, store geopolitical data (county, district, resource area), and store current land availability data.
- o LLD will not be collected in Kansas prior to the Target deployment unless funds are made available and a plan is approved.

B. Policy Considerations-

- o No written policy exists that specifies the authority of the Service Center to develop and implement LLD data standards; nor is there management concurrence as to the purpose and intended use of LLD in the Interim and/or Target System.

5.2 Status

Task Manager: Mike Thompson SC-322

The Status data file involves the collection of land and mineral ownership information from primarily the Master Title Plat, Historical Index, and Control Document Index. This includes the collection of "historical" ownership data such as prior patented Homesteads that have been reconveyed as a result of land exchanges or portions of Withdrawals that have since been revoked in-part. The Status data is being collected in the western states, with the exception of Alaska, by both in-house and contract methods. Data standards are provided in or added to the Data Element Dictionary, Application 2002, and, like LLD, makes up one of the Target system base building blocks. Handbook development and training are provided by the Service Center (SC-320), as well as contract administration for those states collecting under contract. The process employs a sampling procedure that involves both automated and manual validation and verification steps. The process has a confidence level that ensures an average accuracy rate of 96 percent. The Status data provides the attribute data that describes ownership of land and availability information for a specific legal land unit. The DPS8000 is used to edit and store status data collected as in-house and contract efforts. The DPS6+ provides a data entry and update program and a DPS8000 program is being developed to provide a similar capability.

A. Assumptions-

- o Funds will be available for Idaho and Montana (North Dakota and South Dakota) to continue and complete status data collection in FY91 and 92.
- o Funds will be available to complete the status collection contracts in California, Oregon, and Washington in FY91 and to complete data clean-up and contract closures in these states in FY92.
- o Status data will be the major base building block for all land and mineral case processing functions in the Target System.
- o Status data collection was not conducted in Alaska, since Alaska's status data is stored in the AALRS (system).

- o Status data will not be collected in Nebraska, Kansas, or Oklahoma prior to the Target deployment unless funds are made available and data collections plans are approved.

B. Policy Considerations-

- o No written policy is in place specifying that the Service Center has the authority to develop and implement Status data standards; nor is there management concurrence that Status data relationships will set the functional standard for case processing in the Target System, thereby replacing the functions of CR/ORCA, MCR, and Master Name.

5.3 Geographic Coordinate Data Base

Task Manager: Marilyn Myers-Chapman SC-326

The Bureau has awarded two contracts for GCDB data collection. One contract covers the nine Western states (Montana, Idaho, California, Nevada, Utah, Wyoming, Colorado, New Mexico, and Arizona) and the Eastern States Office. Alaska is under their own contract. Oregon is collecting their data in-house.

Alaska will start their contract for data collection in early November 1989. The pilot State, New Mexico, will start their contracted data collection on or about November 27, 1989. All other states will begin to collect data in May 1990. A contractor evaluation is planned in 1990.

Data Collection will consist of abstracting of the Public Land Survey System and other related information, raw data entry, and computation and/or digitizing. As geographic coordinates are obtained, they will be placed in the Data Collection Data Base, along with other pertinent data and attributes.

5.4 Resource Base Data

Task Manager: Mike Hutt SC-670

The BLM's Resource Base Data (RBD) will contain digital data files of the following: terrain, hydrography, cultural infrastructure, and transportation net. The Bureau will "add value" to the raw data obtained from contract or exchange. "Value added" information will include more data on the four base layers (cultural, transportation, topographic, and hydrologic) not included on USGS topographic maps. This effort will include data verification and validation of information content. The agencies contributing to the RBD effort will be able to reduce the duplication and overlapping requirements for data capture. Federal agencies, State and local governments and private industry will benefit in the sharing of the information included in the RBD.

The Bureau's policy for the administration of the RBD will be concentrated on the principles of efficiency and consistency. The centralized administration of the RBD effort at the SC will help to achieve the requirements of this concept. Contract administration, including "raw" data verification will be the responsibility of the Service Center. The SC will be responsive to the SO RBD determined priorities. Populating the RBD data base with "value added" field verified information will be the responsibility of the State Offices. Conflicts will be addressed by the RBD Steering Committee (Field Committee Representative, WO-704 Representation, Spatial Cartographic Standards Team Representative and the Bureau RBD Lead).

A. Assumptions-

- The Bureau will support the RBD effort with increased funding beginning in 1992.
- No other base themes may be collected beyond the four base themes, i.e., terrain, hydrography, transportation, and cultural infrastructure.

B. Policy Considerations-

- Policy is needed to outline roles/responsibilities in support of this activity.

5.5 Cyclic Aerial Photography

Task Manager: Fred Batson SC-670

The BLM will finalize and implement a cyclic aerial photography acquisition program to provide recurrent photo coverage over the Bureau's critical management areas. The Cyclic Plan is defined as follows: 1:24,000 scale, using natural color film with a repeat cycle of 8 to 10 years as dictated by local requirements. Exceptions for western Oregon (1:12,000 scale and 5-year cycle) and Alaska (1:60,000 scale and color infrared film) are recognized. This photography is critical to enable the Bureau to gather, refine, and maintain both Resource Base Data (RBD) and the Automated Resource Data (ARD) in support of LIS implementation and field management requirements.

Funding for the implementation of the Cyclic Plan will be provided in subactivity 4540 through the AWP process as funds become available starting with FY 1992. In order to maximize the efficiency of the Cyclic Plan and ensure adequate interagency coordination, all contracts related to acquisition of cyclic aerial photography coverage will be administered by the Service Center. States will be responsible for ensuring priority areas are identified and will assist in product inspection and acceptance.

A. Assumptions-

- Planning tasks will be developed in FY90-91.
- The Bureau will support the cyclic photography acquisition program via the RBD initiative beginning in 1992.
- Any acquisition schedule would be tied to the RBD collection schedule.

B. Policy Considerations-

- Policy is needed to outline roles/responsibilities related to the accomplishments of Cyclic Aerial Photography.

5.6 Automated Resource Data (ARD)

Task Manager: Janis VanWyhe WO-704

Needs Determination. After development of ARD Collection Methodology Standards, Washington Program Offices will direct States to determine how much and which of their information meets the standards established.

Data Collection Plans. After the State responses, the WO program offices will direct the States to develop a Resources Data Collection Plan to populate data bases with information which meets standards and to collect information for areas which do not meet standards. A standard format template for such plans will be provided to the program offices by the WO Data Administrators.

A. Assumptions-

- This task depends on completion of Data Management Task I.7, Develop Resource Program Methodology Standards for Resource Information Collection.
- The modernization program budget strategy allows for the Target System to accommodate resources application and data beginning 1995-6?
- The needs determination/analysis will be a major effort.
- Development of ARD data collection plans is dependent on completion of the RBD data collection plans and are dependent on available funding.
- The Primes will be used for resources data/Bureauwide applications, local GISs until the Target System is developed to the point of including resources. Then resources data will be transferred to the Target System.
- There will not be additional sources of money for resources data collection and ongoing land management issues will provide reasons and priorities for most specific data collection efforts. Programs will bear the costs of data collection.
- There is existing data which will meet data collection methodology standards and can be used to populate data bases, in addition to some collection of new information.

B. Policy Considerations-

- Policy will be developed to ensure data collection plans adhere to alphanumeric and spatial data standards as approved by the Bureau Data Administrator.
- Washington policy/direction will be needed on this approach.

5.7 Status Withdrawal Data Collection

Task Manager: Mike Thompson SC-322

Current Status collection in the western states did not include historical withdrawal and classification data/information. A data collection plan, handbook modification, training, and funding are necessary to accomplish this task. Adjudicators have stated that such data is essential to the Target System.

A. Assumptions-

o 4550 funding will be available in NM, AZ, UT, ID, NV, CO, WY, MT, OR, and CA to recollect/collect historical withdrawal/classification data.

o Training will be conducted by SC personnel in the following states:

- Utah pilot training	- Jan. 1990
- Idaho	- Mar. 1990
- Montana	- Mar. 1990
- Arizona	- Apr. 1990
- New Mexico	- Apr. 1990
- Wyoming	- Sep. 1990
- Colorado	- FY 91

o Nevada's withdrawal collection will be completed in FY90.

o The Oregon and California Status collection contract can be modified to include historical data.

o California and Oregon will collect missed withdrawal data in FY92.

B. Policy Considerations-

o WO must establish pre or post FLPMA data standards.

5.8 ESO Status/LLD Data Collection

Task Manager: Mike Thompson SC-322

The ESO and SC are currently converting Forest Service data to the Status data format for District use. On the basis of data conversion success, ESO and the SC will determine additional Status and/or Status/LLD data collections.

A. Assumptions-

o Other agency data conversions will provide most of ESOs Status and LLD data needs.

o On the basis of the success of the USFS data conversion, ESO and the SC will evaluate a conversion of Corps of Engineer data.

B. **Policy Considerations-**

- Policy and guidance must be developed to ensure integration of the ESO data base into the Interim and Target developments.
- MOUs have been approved in support of F.S. and C.O.E. data conversion activities.

5.9 Other Data

Task Manager: TBD

Other Data includes Law Enforcement, Fire, etc.

Task Title: 5.1 Data Collection - LLD

Task Manager: T.Adler SC-322

Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
5.1.1	Develop Guidance	T.Adler, SC-322	J.Moeller	12/1/89	2/1/90		Policy	Approved by WO-700	
5.1.2	Service Center Support for LLD Data Collection	T.Adler, SC-322		1/1/84	9/9/91		Handbook	State Teams Hired	Prior to 1984, LLD was collected in OR and AZ
5.1.3	Conduct LLD Collection In Oregon	B.DeViney, OR-940	T.Adler	1/1/79	1/1/81		File	Completed	
5.1.4	Conduct LLD Collection in Arizona	J.Jacobs, AZ-940	T.Adler	9/1/83	9/1/88	Data Tasks 3.4, 4.5, 9.0	File	Completed	
5.1.5	Conduct LLD Collection in NM and OK	R.Gonzales, NM-940	T.Adler	1/2/84	9/1/88	"	File	Completed	
5.1.6	Conduct LLD Collection in Montana, North & South Dakota	R.Dickman, MT-940	T.Adler	2/1/84	9/1/88	"	File	Completed	
5.1.7	Conduct LLD Collection in Utah	J.Sintz, UT-940	T.Adler	9/1/84	9/1/87	"	File	Completed	
5.1.8	Conduct LLD Collection in Nevada	O.Weimer, NV-940	T.Adler	1/1/85	9/9/89	"	File	Completed	Complete
5.1.9	Conduct LLD Collection in Idaho	S.Deroin, ID-940	T.Adler	9/1/85	9/1/88	"	File	Completed	
5.1.10	Conduct LLD Collection in Wyoming and Nebraska	C.Wood, WY-940	T.Adler	1/1/85	9/1/88	"	File	Completed	
5.1.11	Conduct LLD Collection in Colorado	J.Jiminez, CO-940	T.Adler	1/1/85	9/1/88	"	File	Completed	

Task Title: 5.1 Data Collection - LLD

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Task Manager: T.Adler SC-322

Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
5.1.12	Conduct LLD Collection in California	C.Anderson, CA-940	T.Adler	1/1/85	9/1/88		File	Completed	
5.1.13	Conduct LLD Collection in Alaska	P.Moreno, AK970	T.Adler	6/20/88	8/20/90	Data Tasks 3.4, 4.5, 9.0; Technology Tasks 7.1, 7.2	File	Completed	Collection is performed on Prime

Task Title: 5.2 Data Collection - Status

Task Manager: M. Thompson SC-322

Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
5.2.1	Develop Guidance	M.Thompson, SC-322	J.Moeller	12/1/09	2/1/90		Policy	Approved by WO-700	
5.2.2	Service Center Support for Status Collection	M.Thompson, SC-322		1/1/84	9/1/92		Handbook	Data Team Hiring	
5.2.3	Conduct Status Collection in Arizona (Contract)	J.Jacobs, AZ-940	M.Thompson	9/3/84	4/1/88	Data Tasks 3.6, 4.6, 9.0	Pass Edits	Block File Stored	
5.2.4	Conduct Status Collection in New Mexico (Contract)	R.Gonzales, NM-940	M.Thompson	8/3/84	2/28/86	"	Pass Edits	Block File Stored	
5.2.5	Conduct Status Collection in Utah (In-house)	J.Sintz, UT-940	M.Thompson	9/3/84	9/1/89	"	Pass Edits	Block File Stored	
5.2.6	Conduct Status Collection in Montana, ND, DS (Contract)	J.Norris, MT-940	M.Thompson	10/1/86	12/1/89	Data Tasks 3.4, 4.6, 9.0	Pass Edits	Block File Stored	
5.2.7	Conduct Status Collection in Nevada (In-house)	O.Weimer, NV-940	M.Thompson	5/1/87	9/30/89	"	Pass Edits	Block File Stored	
5.2.8	Conduct Status Collection in Idaho (In-house)	S.Deroin, ID-940	M.Thompson	9/1/86	9/1/92	Funding	Pass Edits	Block File Stored 4550 Funds Approved	

Task Title: 5.2 Data Collection - Status

Task Manager: M. Thompson SC-322

Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
5.2.9	Conducted Status Collection in Colorado (Contract)	F.Jimenez, CO-940	M.Thompson	12/30/87	9/30/90	Data Tasks 3.4, 4.6, 9.0	Pass Edits	Block File Stored	
5.2.10	Conduct Status Collection in Wyoming (Contract)	D.O'Mera, WY-940	M.Thompson	12/30/87	2/1/90	"	Pass Edits	Block File Stored	
5.2.11	Conduct Status Collection in California (Contract)	C.Anderson, CA-940	M.Thompson	9/30/88	9/30/91	" Funding	Pass Edits	Block File Stored	
5.2.12	Conduct Status Collection in Oregon & Washington (Contract)	B.Deviney, OR-940	M.Thompson	9/30/88	12/30/91	Data Tasks 3.4, 4.6, 9.0, Funding	Pass Edits	Block File Stored 4550 Funds Approved	
5.2.13	Montana, ND, SD, Indian Reservation Status Data Collection (In-house)	J.Norris, MT-940	M.Thompson	12/20/89	12/30/90	Data Tasks 3.4, 4.6, 9.0, Funding	Pass Edits	Block File Stored 4550 Funds Approved	

Task Title: 5.3 Data Collection GCDB

Task Manager: M. Myers-Chapman SC-326

Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
5.3.1	Service Center Support for GCDB Collection	M.Myers-Chapman, SC-326		10/1/89	10/13/90		Uniform GCDB Policy Contract Award	Approved by WO-700	
5.3.2	Collect GCDB in Alaska	J.Toms, AK-942	M.Myers-Chapman	1/2/90	10/92	Data Tasks 3.3, 4.12	File	Completed	
5.3.3	Collect GCDB in Arizona	J.Shotwell, AZ-942	M.Myers-Chapman	5/1/90	10/92	"	File	Completed	
5.3.4	Collect GCDB in California	B.Zickwolf, CA-942	M.Myers-Chapman	4/15/90	10/93	"	File	Completed	
5.3.5	Collect GCDB in Colorado	H.Gilson, CO-942	M.Myers-Chapman	4/15/90	10/92	"	File	Completed	
5.3.6	Collect GCDB in Eastern States	C.Rodine, ESO-940	M.Myers-Chapman	1/94	TBD	"	File	Completed	
5.3.7	Collect GCDB in Idaho	J.Knight, ID-942	M.Myers-Chapman	5/15/90	1/92	"	File	Completed	
5.3.8	Collect GCDB in Montana	M.Brown, MT-942	M.Myers-Chapman	4/15/90	8/93	"	File	Completed	
5.3.9	Collect GCDB in Nevada	D.Clark, NV-942	M.Myers-Chapman	5/1/90	10/92	"	File	Completed	
5.3.10	Collect GCDB in New Mexico	J.Meeks, NM-942	M.Myers-Chapman	11/15/89	10/92	"	File	Completed	
5.3.11	Collect GCDB in Oregon	M.Thomas, OR-942	M.Myers-Chapman	1/1/88	4/91	"	File	Completed	
5.3.12	Collect GCDB in Wyoming	S.Frencg, WY-942	M.Myers-Chapman	5/15/90	7/92	"	File	Completed	

Task Title: 5.4 Data Collection Plans/Resource Base Data

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Task Manager: M. Hutt SC-670

Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
5.4.1	Develop Guidance	D.Meier, WO-700	Hutt	1/1/90	5/1/90		RBD Matrix	RBD Instruction Memorandum	
5.4.2	Refine Budget Estimates	Hutt, SC-670	State RBD Leads	6/1/90	9/1/90	Data Task 4.13.2	Budget Info.		
5.4.3	Determine Priorities	State Office RBD Leads	Program Leads	1/1/91	6/1/91	State Office RBD Briefings	Field RBD Requirements	State Office Collection Plan	This includes a review of existing data.
5.4.4	Consolidate State Office Requirements	RBD Steering Committee	Meier, Hutt	6/1/91	8/1/91	Data Task 4.13	Bureau RBD Requirements	BMT-FC Approval	
5.4.5	Develop RBD RFP	SC-652	SC,SOs	6/1/91	12/1/91	"	RFP Specifications	CBD Announcement	
5.4.6	Develop QC-QA Procedures	SC-670, SC-670	SC,SOs	8/1/91	3/1/92	"	Procedures	Instruction Memo	
5.4.7	Award RBD Contracts	SC-652	SC,SOs	12/1/91	5/1/92	RBD Budget	RBD Contracts	Instruction Memorandum	1st year award
5.4.8	Data Acquisition	SC-670, Hutt	RBD Leads	5/1/92	Contin.	Contract Compliance	RBD Data	RBD Use	
5.4.9	Maintain-Archive RBD	BDA	SODAs, RBD Leads	5/1/92	Contin.				

Task Title: 5.5 Cyclic Aerial Photography Data Collection

Task Manager: F. Batson SC-677

Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
5.5.1	Refine Budget Estimates	Batson, SC-670	State RBD Leads	6/1/90	9/1/90	Data Task 4.13.2	Budget Info.		
5.5.2	Determine Priorities	F.Batson, SC-670	State Office RBD leads	1/1/91	6/1/91		State Office Photo Priorities	Approved by SC-670	
5.5.3	Consolidate State Office Requirements	F.Batson, SC-670	RBD Steering Committee	6/1/91	8/1/91	Data Tasks 4.13	Bureau Photo Priorities	Approved by WO-700	
5.5.4	Multi-Agency Coordination	Meier, WO-704	F.Batson, M.Hutt	9/1/91	12/1/91	"	Project Agreements	Interagency Coordination and Approval	
5.5.5	Develop IFB	F.Batson, SC-670	M.Hutt	9/1/91	1/1/92	"	IFB for Award	Advertise Contracts	
5.5.6	Award Contracts	SC-652	M.Hutt, State Office RBD Lead	1/1/92	5/1/92	"	Awarded Contracts	Monitor Contracts	1st year award
5.5.7	Initiate Acquisition	SC-652	M.Hutt, State Office RBD Leads	5/1/92	Contin.	"	Photo Coverage	Contract Verification	
5.5.8	Duplication, Storage and Archive	F.Batson, SC-670	M.Hutt	5/1/92	Contin.	"	Responsible Archive		Includes CD-ROM Optical Disk

Task Title: 5.6 Automated Resources Data (ARD)

April, 1990

Task Manager: J. VanWyhe WO-704

Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
5.6.1	Develop ARD Data Collection/Conversion Strategy and Template Plan for States to use in States Tactical Plans	M.Penfold, WO-300	D.Traylor (WO-340) Lead; M.Thompson, SC-322;J.Collins, SC-322;A.Strobel, SC-325;L.Pack, SC-325						

Task Title: 5.7 Status Withdrawal Data Collection

Task Manager: M. Thompson, SC-322

Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
5.7.1	Obtain W.O. Guidance	M.Thompson, SC-322	A.Jameson, J.Moeller	1/1/90	2/15/90		Policy	Approved by WO-700	
5.7.2	Develop Pilot Training in Utah	M.Thompson, SC-322	K.Freiberg, O.Weimer, C.Anderson, K.Ferguson $120K FY91	1/22/90	1/26/90	Data Tasks 4.6, 5.2, 4550 Funding	Handbook	Approved by SC-320, 4550 Funds Approved	
5.7.3	Develop Collection/Training Plan for All Western States	M.Thompson, SC-322	A.Jameson, ALMRS Coordinators	1/29/90	3/90		Memorandum	Approved by SC-100	

Task Title: 5.7 Status Withdrawal Data Collection

Task Manager: M. Thompson, SC-322

Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
5.7.7	Training Idaho Staff	M.Thompson, SC-322	J.Saunders, L.Precosky	3/19/90	3/23/90	Data Tasks 4.6, 5.2, Funded per Data 5.2.8	Handbook	Training completed	
5.7.8	Training Montana Staff	M. Thompson, SC-322	T.Laird, E.Alvarado	3/26/90	4/2/90	Data Tasks 4.6, 5.2, Funding	Handbook	Training completed Funds approved	
5.7.9	Training N.M. Staff	M.Thompson, SC-322	T.Adler, B.Benz	4/16/90	4/20/90	"	"	"	
5.7.10	Training Arizona Staff	M.Thompson, SC-322	T.Adler, B.Benz	4/16/90	4/20/90	"	"	"	
5.7.11	Training Wyoming Staff	M.Thompson, SC-322	L.Precosky, C.Laudenbach	9/10/90	9/14/90	"	"	"	
5.7.12	Training Colorado Staff	M.Thompson, SC-322	L.Precosky, C.Laudenbach	10/1/90	10/5/90	"	"	"	

Task Title: 5.8 ESO Status/UD Data Collection

Task Manager: M. Thompson, SC-322

Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
5.8.1	Develop F.S. (LOS) Data Conversion Program	M.Thompson, SC-322	M.Negri	9/1/89	3/30/90		MOU/IA	Signed USFS, SC-100, ESO-900	
5.8.2	Determine ESO Data Collection Requirements	M.Thompson, SC-322	M.Negri	4/15/90	5/4/90		In-house SOW	Approved by SC-100, ESO-900	

Task Title: 5.9 Other Data
(e.g., Law Enforcement & Fire)

April, 1990

Task Manager: TBD

Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks

6 Data Preparation

This activity involves the preparation of data to be used in data base loading in support of the Interim and/or Target System developments. Preparation would include data inventory and standards reviews, crosswalk to Logical Data Models, development of data conversion requirements, certification of level of data accuracy or integrity, and data dictionary requirements, such as description, naming convention standard, proprietary or privacy requirements, and edit/validation requirements.

A. Assumptions-

- Data standards including data conversion requirements will be available for each of the Interim and Target development tasks.
- Data requirements will be supported by a data dictionary or edit requirements.

B. Policy Considerations-

- The Data Element Dictionary will be recognized by management as the data standards criteria and documentation that will be applied when preparing data for conversion and loading into Interim and/or Target Systems.
- Policy must be developed to install the Service Center as the responsible organization for Data Dictionaries development and management.

6.1 Experimental Data Integration and Testing

Task Manager: Keith Hedlund SC-326

This task involves the development of an experimental data integration design. This experimental data design will provide testing of data collection efforts; i.e., LLD, Status, GCDB, ARD, and RBD, as well as testing data relationships, logical data model assumptions, user interfacing, output expectations, and response times, etc.

A. Assumptions-

- Provide benchmark to assist in the evaluation of Live Test Demonstration Offerors submissions.
- The experimental data integration design will be developed and managed by all three IRM Divisions at the Service Center, with project management provided by SC-326.

B. Policy Considerations- (None Required)

6.2 Data Catalogue

Task Manager: Janis VanWyhe WO-704

This task involves the preparation of the BLM Data Catalogue that describes selected data bases and hard-copy records, highlighting the data expected to be requested most often or to be of the greatest benefit to external (non-BLM) users. The BLM Data Catalogue will educate other government agencies, organizations, and the public about what data BLM is making available (particularly in automated form) and how to obtain it.

A. Assumptions-

- Other government agencies, organizations, and the general public want improved access to the data BLM collects as part of its normal operations.
- Data sharing is a major benefit of automation, as described in the benefit/cost analyses developed for ALMRS in 1985 and Modernization in 1989. However, a track record quantifying the actual amount of data sharing will be more credible to reviewers of the Modernization project than benefit/cost studies.
- Currently, access to BLM's information, either hard-copy records or automated files, is cumbersome for someone not familiar with BLM operations. The demand for BLM data will increase substantially if access is made easier by using the BLM Data Catalogue for "one stop" shopping.
- The identification and subsequent use of BLMs data will improve service to the public, facilitate data standardization and sharing, and minimize duplication of effort.
- BLMs information dissemination efforts will be similar to those used by other agencies in Interior, Commerce, and other Departments. A fundamental part of their standard techniques is a listing of what information is currently available, what will become available, and how to obtain it - no matter how BLM ends up conducting outreach, the BLM Data Catalogue will be required.
- All field offices will use the BLM Data Catalogue to advertise to their user publics what information is available, and will assist in updating the catalogue by identifying new demands for data and changes in locally-completed data automation efforts. BLM will continue fundamental supply and demand analyses to update the BLM Data Catalogue.
- Improving understanding of what data is available through the BLM Data Catalogue will help quantify how much demand there is for BLMs data, in what form the external users want it (including on-line access from remote sites), and will be useful in sizing the Target System to meet it.
- Both hard copy and automated data will be included in the BLM Data Catalogue. A "best guess" judgment call will be the basis for determining what data will be included in the initial BLM Data Catalogue.

B. Policy Considerations-

- Public outreach concerning automation will emphasize the improved access to BLMs data and will be proactive. As described in IM 90-___, the BLM Data Catalogue will be the primary vehicle for advertising what data BLM has available for sharing with other government agencies and the public. Other government agencies oriented towards data sharing may also distribute BLM information, but BLM will not reply exclusively upon them.

- The BLM Data Catalogue will not be an exhaustive list of all data available from BLM, but instead will highlight the data most in demand. BLM will change the content and presentation ("packaging") of the BLM Data Catalogue based upon the response. BLM will evaluate demand regularly, and projections of future demands will be updated for use in designing the Target System. The BLM Data Catalogue will be available initially as both a hard copy document and as an electronic file, but will not be accessible on-line.

- Cost recovery policies defined in IM 90-___ will be reflected in the BLM Data Catalogue.

- Data access and security policies defined in IM 90-___ will be reflected in the BLM Data Catalogue.

- Policy and guidance will be provided to establish the Data Catalogue distribution procedures.

- Completing this task, together with People and Organization Task 3.4 (training existing users in the public rooms) and People and Organization Task 3.2 (a proactive outreach program to explain how Modernization will improve access to BLM data for anticipated users) will reduce the risks that the projected benefits of automation will not be received due to a lack of understanding by external users. In addition, some BLM personnel responsible for updating data will gain an increased understanding of the need for data quality by seeing how their work is used.

6.3 Interim Release No. 1

Task Manager: Mike Thompson SC-322

This task supports the data conversion of AALRS data to the Prime/Oracle platform. The purpose is to move Land and Minerals processing capabilities from the Alaska Boroughs (AALRS) platform to the Prime. New Mexico and Nevada have been proposed as beta sites after the software is loaded sometime in the fall of 1990 to test the data base functionalities for Case Recordation and Mining Claim Recordation data, and LLD to the Section level only.

A. Assumptions-

- Release 1 will include data standards that will strive to be consistent with those to be applied throughout the Bureau.

- The Prime and Oracle platform can adequately accommodate the AALRS data and perform the required data base functions.

B. Policy Considerations-

- Policy is needed to establish responsible parties for development of data standards and data conversion requirements.

6.4 Interim Release No. 2

Task Manager: Mike Thompson SC-322

This task involves data integration enhancements over Release No. 1 to primarily support the loading of the data base on Lower 48 Prime/Oracle platforms. This release is scheduled for sometime around March of 1991, and will include additional functionality in the Status and LLD components of the Lower 48 data.

A. Assumptions-

- Release 2 will include data standards being applied throughout the Bureau. The Release will occur in all Bureau States on a staggered scheduled, replacing the CR/ORCA and MCR Honeywell support, and providing storage, maintenance, and integration of LLD and Status and Primes.

- States' Primes and Oracle platforms are capable of accommodating AALRS, CR/ORCA, MCR, LLD, and Status data and perform the required data base functions.

B. Policy Considerations-

- Policy is needed to establish responsible parties for development of data standards and data conversion requirements.

6.5 Target Award

Task Manager: Mike Thompson SC-322

This task is associated with preparing the data specifications and conversion requirements for the Target contractor as of the date of the award. Standardized data are essential to provide the contractor with the capability to begin data base design and testing. All data to be integrated to the Target platform must either be standardized to one corporate standard, as identified by the Corporate Logical Data Model and supported dictionary, or conversion requirements drafted to support the development of a new standard in the Target System.

A. Assumptions-

- All Target scope data within the Land and Minerals Records and Administration functions will either be standardized or be identified as a conversion requirement.

- Data requirements and Specifications for Resources and Technical Services components will be described on a data element base.

B. Policy Considerations-

- No policy exists that specifies responsible parties for each of the Bureau's Target data components.

Task Title: 6.1 Experimental Data Integration Design

Task Manager: K. Hedlund, SC-326

Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
6.1.1	Develop DB Guidance and Strategy	K.Hedlund, SC-326	M.Myers-Chapman, Leopold	2/1/90	2/15/90		Policy	WO-700	
6.1.2	Select Test in NM	K.Hedlund, SC-326	G.Oviatt, M.Thompson	12/11/89	1/1/90		Draft Map	Approved by SC-320	
6.1.3	Load PCCS Data and Verify	K.Hedlund, SC-326	J.Nighbert, J.Baird	12/22/89	2/28/90		Files	Loaded by K.Hedlund	
6.1.4	Add Other Attributes (L&M)	K.Hedlund, SC-326	M.Thompson, D.Oakland	2/20/90	3/31/90	Data Tasks 3.3, 3.4, 4.5, 4.6, 4.12, 5.1, 5.2, 5.3, 6.4, 6.5, Target 4.1	Data Files	Loaded by K.Hedlund	
6.1.5	Expand Test Area	K.Hedlund, SC-326	M.Thompson, D.Oakland	5/1/90	9/30/90	"	Draft Map	Approved by SC-320	
6.1.6	Link ALMRS-GCDB-Limited ARD	K.Hedlund, SC-326	M.Thompson, D.Oakland	7/1/90	9/30/90	"	Update Files	Loaded by K.Hedlund	

Task Title: 6.2 BLM Data Catalogue

Task Manager: Janis VanWyhe WO-704

Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
6.2.1	Request Field Committee to Recommend Automated and Hard Copy Data with High Public Interest to Include in Initial BLM Data Catalogue	J.Moeller, WO-700		2/26/90	2/28/90	Decision to complete BLM Data Catalogue as scheduled	Verbal request to Field Committee for Data Task 6.2.3		
6.2.2	Draft IM Announcing Policies and Procedures for Completing Initial BLM Data Catalogue	C.Grymes, WO-704		2/28/90	3/16/90	Closure on action plan for Data Task 6.2 and Data Task 1.4	Draft IM to field offices as early alert	Field offices receive signed IM	
6.2.3	Field Committee Submits Recommendations for Initial Content	J.Moeller, WO-700		2/26/90	3/30/90	Data Tasks 1.4, 8.2	Recommend content for initial BLM Data Catalogue, to SC-320 for Data Task 6.2.4	WO-704 receive recommendations from Field Committee members	Seeking to identify data that is most in demand and is readily available, including maps, EIS's, Case Recordation/ORCA files, microfiche of Mining Claim Recordation System data, etc.

Task Title: 6.2 BLM Data Catalogue

April, 1990

Task Manager: Janis VanWyhe WO-704

Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
6.2.4	Complete Draft BLM Data Catalogue	B.Woerner, SC-326		12-01-89	04-30-90	List of priorities from WO-704 for initial content as submitted by field. Data Tasks 1.4, 5.1, 5.2, 5.3, 8.2.	Draft BLM Data Catalogue	Submission of draft for management review and decision (Task 6.2.5)	Introduction to BLM Data Catalogue will highlight automation plans for improving data access and the anticipated schedule for providing new automated files, including status/LLD and GCDB data releases by state
6.2.5	Management Decision to Issue Initial BLM Data Catalogue	D.Stepanek, WO-100		5/15/90	6/15/90	(WO-110) concurrence, P&O Task 3.2	Initial BLM Data Catalogue	Signed IM for public distribution of initial BLM Data Catalogue and its use	
6.2.6	Evaluation of Utility of Initial BLM Data Catalogue	Someone independent of development and use of the catalogue, stuckee to be determined	$1000 for travel, 2 weeks full-time of one individual	9/15/90	10/15/90	Distribution of BLM Data Catalogue as proposed in Data Task 6.2.5	Completed evaluation	Report signed	Task may be done in concert with evaluation of outreach to date
6.2.7	Management Decision on Revision of BLM Data Catalogue	J.Moeller, WO-700		10/15/90	11/15/90	Evaluation completed in Data Task 6.2.6	Management direction to WO-704 for Task 6.2.8	Memo signed	

Task Title: 6.2 BLM Data Catalogue

Task Manager: Janis VanWyhe WO-704

Step Order	Action Steps	Responsible Person	People Resource	Start	Finish	Dependencies	Deliverables	Completion	Remarks
6.2.8	First Revision of BLM Data Catalogue	C.Grymes, WO-704	B.Woerner, SC-326, Public Affairs Review	11/15/90	1/15/91	Management direction from Data Task 6.2.7	Completed revision	IM for distribution signed	

Task Title: 6.3 Interim Release No. 1

Task Manager: M. Thompson SC-322

Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
6.3.1	Develop Guidance	B.Ader, SC-344	R.Thomas	12/1/89	2/28/90		Guidance	Approved by F.C.	
6.3.2	Support Data Preparation for Interim Rel. I	M.Thompson, SC-322		1/1/88	6/1/90	Data Tasks 3.1, 4.1-4.5; Tech. Task 7.1	Data Standards	Review by B.Ader	
6.3.3	Issue Case Type-Action Code Matrix	M.Thompson, SC-322	P.Moreno, B.Ader	12/1/89	4/1/90	Data Tasks 4.1-4.5	Comments	Review by ALMRS Coordinator	
6.3.4	Issue Final Data Standards	M.Thompson, SC-322	P.Moreno, B.Ader, ALMRS Coordinators	4/1/90	6/1/90		Standards	Approval by J.VanWyhe	

Task Title: 6.4 Interim Release No. 2

April, 1990

Task Manager: M. Thompson SC-322

Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
6.4.1	Develop Guidance	B.Ader, SC-344	J.Moeller	12/1/89	3/1/90		Guidance	Approved by F.C.	
6.4.2	Support Data Preparation for Interim Rel. 2	M.Thompson, SC-322	ALMRS Coordinators	6/1/90	2/27/91	Data Tasks 3.2, 4.1-4.5; Tech. Task 7.2	Data Standards	Review by J.VanWyhe	
6.4.3	Issue Final Data Standards for Interim Rel. 2	M.Thompson, SC-322	ALMRS Coordinators	1/1/91	2/28/91	Data Tasks 3.2, 4.1-4.5	Final Standards	Approval by J.VanWyhe	

Task Title: 6.5 Target Award

April, 1990

Task Manager: M.Thompson SC-322

Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
6.5.1	Develop Guidance	M.Thompson, SC-322	D.Stepanek	6/1/90	7/1/90		Policy	Approval by WO-700	
6.5.2	Compile Corporate or Target Data List	M.Thompson, SC-322	ALMRS Coordinators	6/30/90	12/30/90	Data Tasks 3.5-3.10, 4.0, 5.1-5.4, 6.1, 9.0; Target 2.0	Data List	Approved by J. Vanwyhe	
6.5.3	Develop Data Conversion Requirements	M.Thompson, SC-322	ALMRS Coordinators	12/30/90	6/l/91	Target 2.0	Requirements	Approved by J. VanWyhe	
6.5.4	Deliver to SC-3l0/ Target Contractor	M.Thompson, SC-322	L.Money	6/l/91	6/7/91	"	Final Data Specs.	Approved by J. VanWyhe	

7 RESERVED

8 Records Administration

The move from a manual record keeping environment to an electronic record keeping environment will produce significant changes in both BLM data and records. The development of a planned approach for moving some of the Bureau's processes into an automated environment will allow resolution of problems prior to the installation of the Target System. This task includes transition planning, developing an automated Bureauwide Records Inventory to manage Bureau records and data, and the integration of the Bureau's paperwork management system into the Target System.

A. Assumptions-

- The implementation of the Target System will produce major changes in work processes. This will have a significant impact on records management tasks, such as appraisal, retrieval, disposition, maintenance, etc.
- BLM will seek "official records" status of its automated records.

B. Policy Considerations-

- Funding and the degree to which the various procurement segments are implemented will determine the extent of affected records management areas. Extensive coordination will be necessary with National Archives, Solicitor's Office, other Federal and State agencies, and possibly Congressional liaison staffs.
- Delegations of Authority for aspects of policy and guidance development must be clearly articulated to improve efficiencies at the Service Center, Washington Office and Field Office levels.
- Electronic Records policies must be finalized and issued.

8.1 Records Transition Plan

Task Manager: Wendy Spencer SC-324

This task involves plans for moving from a current manual records environment to one in which many of the records are automated. This includes resolving problems related to the adequacy of documentation, legal record keeping requirements, retention and disposition requirements for current, interim, and new records, and compliance with Federal records access laws. Other concerns are:

1) Managing the disposition of previous records being replaced in the Target System.

2) Developing retention and disposition schedules for previous manual records and Target System records (both interim records created as a result of moving information from one medium to another and new official Bureau records created as a result of the Target System).

3) Ensuring adequate audit trails are maintained to guarantee integrity of the information in the Target System and that the records created by the system adequately document the mission of the Bureau and protect the rights and interests of the Federal Government and the public.

4) Ensuring adequate system safeguards are established to guarantee integrity of Bureau Target System records by preventing unauthorized access, destruction, or changes to official Bureau records.

5) Ensuring that those official records of the Target System that contain information that is appraised for permanent retention are adequately preserved.

6) Ensuring that adequate indexes or other retrieval aids are created to permit efficient and effective retrieval of Bureau records that are stored electronically.

A. Assumptions-

- Records now manual will be automated, at least in part, making a significant difference between electronic and non-electronic media. Emerging technology will make development of new record types or record combinations possible. New record systems will be created using automation as the primary base rather than traditional bases such as paper or microfilm. Development of policy and procedures with New Mexico as the Pilot State will generally be applicable Bureauwide.

- The Target System will result in mixed media record keeping; that is, some information will be stored electronically on line or in archived data files and some will be stored in image form on paper film or optical disk.

- The majority of target system information will be appraised for a permanent retention by the National Archives.

- Increased efficiencies will be achieved through better information retrieval.

- Microfilming paper LIS records will be necessary to preserve continuity of adjudicative reference materials.

B. Policy Considerations-

- It is critical that a number of policy related question are answered prior to implementation of the target system. These questions have arisen from the imminent conversion of paper to electronic media, and have not yet resulted in substantive guidance from NARA, GSA or other Federal agencies. Policy and guidance to be addressed includes:

  - When, and under what circumstances does an electronic record become the "official record"?

  - Which office becomes the "office of record" in a system which is expected to regularly exchange and manipulate data?

  - What types of audit trail is necessary for BLMs electronic records to be admissible in court?

  - What length and method of disposition is appropriate for electronic records?

  - What levels of access and security are required to protect Target System records and still provide access as specified by Federal statutes?

- Compliance with existing regulations will be necessary and coordination with the National Archives and Records Administration may result in the development of Governmentwide standards, guidance, and policy. Involvement of the Solicitor in legal rules of evidence questions and access/security concerns will be necessary.

8.2 Automated Bureauwide Records Inventory

Task Manager: Marie Martin SC-324

This task involves the design and development of an automated tool to maintain the Bureau's records inventory. Information about Bureau records includes:

Record series description
Subject function code
Record media
Whether it is an official record or duplicate reference material
Retention and disposition requirements
Whether it is a vital record
Whether the record contains proprietary, personal, or otherwise confidential or sensitive information
The physical location of the records
Record volume

The project involves enhancing the Nevada automated records inventory that was developed in FY 88 for Bureauwide application. The data base will generate various information management reports as well as labels for affixing to various centralized and decentralized record storage devices to explain how long the records need to be kept, any security/access requirements, and how to dispose of them.

The inventory is providing information for use in the Bureau Data Catalog.

The project manager for this effort is located at the Service Center and general oversight will be provided by WO-771.

A. Assumptions-

- The automated records inventory will be transferred to the Interim/Target System RDBMS along with other selected applications.

- The automated inventory will be a distributed system with the capability of consolidating data into a single Bureau system. The Nevada State Office will continue to support this effort and will provide conversion support upon implementation to the Target System. Local records managers will be responsible for maintaining and updating the records inventory for their areas of responsibility.

B. **Policy Considerations-**

- o This task must be coordinated with other records/data hardware/software inventory efforts. Development of guidelines is necessary to ensure new or substantially changed records are included in the system.

8.3 Integration of Bureau's Paperwork Management System Into Target

Task Manager: Wendy Spencer SC-324

This activity is concerned with ensuring that as the Bureau's Modernization effort progresses, electronic data bases created as part of the Target System are effectively linked with the Bureau's existing and future administrative control processes such as office automation including word processing (document management), directives, correspondence, forms, and reports management.

A. **Assumptions-**

- o That the Bureau's Target System will be configured in such a way that, for example:
  - Policy level (WO/SO) users would be able to access ALMRS, ARD, RBD, or GCDB data from their workstation and integrate that data into a policy directive or Bureauwide report at the same workstation (eliminate use of the directives process for collecting report data) and electronically send that document through for electronic surname and signature.
  - Operational level (RA) users will be able to access Target System data from their workstations and integrate that data directly into a recommendation on a specific case action or Resource Management Plan using a standard word processing package and electronically send that document through the approval process.
  - That the Target System design will contain sufficient safeguards to enable the Bureau to use electronic surnames and signatures.
- o Access/Retrieval will occur electronically at the lowest level in the organization.

B. **Policy Considerations-**

- o Approval of a standard file indexing system using subject function codes to link data files stored in the Target System with Bureau "documents."
- o Development of legally admissible standards, guidelines and policy for electronic signature will be necessary before a fully automated document can be used in lieu of paper.

Task Title: 8.1 Records Transition Plans

April, 1990

Task Manager: Wendy Spencer SC-324

Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
8.1.1	Identify Target System Records in New Mexico	Spencer	NM-940, WO-771	12/15/89	6/15/90		Report	Approved by WO-771	
8.1.1.1	Evaluate Existing SC LIS Project Records	Martin	SC-320, NARA-Denver, SC-322, SC-310	1/5/90	4/1/90		Report	Approved by WO-771	Lead to 8.0 Target
8.1.1.2	Evaluate Existing NM Records Mgmt. Practices	Spencer	NM-940, WO-771	9/1/90	4/1/91		Report	Approved by WO-771	
8.1.2	Assess Legal Records Requirements	Spencer	NM-940, WO-771	12/15/89	7/1/90		Report	Approved by WO-771	
8.1.3	Evaluate Public Room Mgmt. Practices	Spencer	SC-320, NM-940, WO-771	3/1/90	9/1/90	P&O 3.4.3; Target 5.1.22	Report	Approved by WO-771, SC-300	See People and Organization Section for further details, Task 3.4
8.1.4	Evaluate Current Records Policies, Procedures, and Guidance	Spencer	NM-940, WO-771, SC-322	12/15/89	10/1/90		Draft Manuals, IMs	Approved by WO-771	
8.1.5	Evaluate Existing SC LIS Records Mgmt. Practices	Martin	SC-310, SC-320	1/5/90	4/1/90	Target 8.1	Report	Approved by WO-771	Lead to 8.0 Target

Task Title: 8.1 Records Transition Plans

Task Manager: Wendy Spencer SC-324

Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
8.1.6	Test Plan Records in New Mexico	Spencer	BLM-NARA Workgroup	9/90	1/91		Draft IMs	Signed by WO-700	
8.1.7	Evaluate of Effect of Target System on Manual Records	Spencer	SC-322, NM-940, WO-771	9/1/90	3/1/91		Report	Approved by WO-771	
8.1.8	Develop SO Transition Plan	Spencer	R.Molinar, SC-322, NM-940, WO-771	10/1/90	5/1/91	Target 7.1.2	Plans	Approved by SC-300, WO-771, NMSO	
8.1.9	Revise and Issue New Records Policies Bureauwide	Cummins	SC-324, NM-940	10/90	FY 91		IMs	Approved	
8.1.10	Develop Guidelines for Standard Screens and Products (MTP, color, etc.)	Spencer	Taskforce	3/15/90	10/1/91	Data 3.4.1	Report	Approved by WO-771	
8.1.11	Develop Standards Guideline for Audit Trails for Electronic Records	Spencer	Taskforce	10/1/90	10/1/91	Data 1.4.1.9, 1.4.1.5, 9.1.15	Draft IM	Approved by WO-771	

Task Title: 8.1 Records Transition Plans

April, 1990

Task Manager: Wendy Spencer SC-324

Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
8.1.13	Develop Guidelines for Microfilming Paper LIS Records	Spencer	NM Task Force	6/1/90	12/1/90	Data 8.1	Report	Approved by WO-771	
8.1.14	Develop Training Necessary for Records Transition	Spencer	SC-324, NM-940	10/90	10/91	P&O 2.8.1	Training Package	Approved by WO-771	See People and Organization Section for details, Task 2.8
8.1.15	Develop Necessary Guidance for Interim Rel. 2	Spencer	SC-324, NM-940, SC-340	10/90	3/91		IM	Approved by WO-771	

Task Title: 8.2 Records Inventory

April, 1990

Task Manager: Marie Martin SC-324

Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
8.2.1	Identify Requirements for Automated Records Inventory Project	Moeller	WO-771		7/89		Project Plan	Approved by WO-771	
8.2.2	System Development	Moeller	SC-324-M.Martin, Nevada SO	7/89	2/90		User Guide, Automated System	Approved by WO-771	
8.2.3	Develop Sample Records Schedules	Martin	NV-950	10/1/89	11/15/89		Schedule	Approved by WO-771	
8.2.4	Write Clean-up Instructions and User Guide	Martin	NV-950	11/1/89	12/31/89		User Guide	Approval by WO-771	
8.2.5	Prepare for and Conduct NV Training	Martin	NV-950	1/1/90	3/31/90		Training Module	Complete by WO-771	
8.2.6	Submit Data Elements for DED	Martin	NV-950	5/1/90	6/1/90		Data Elements Change Requests	Added to DED	
8.2.7	Clean-up Remaining Inventories	Martin	NV-950	3/1/90	5/1/90		Progress Report	Approved by WO-771	
8.2.8	Finalize User Guide	Martin	NV-950	5/31/90	6/30/90		User Guide	Approved by WO-771	See P&O 2.8.2
8.2.8.1	Finalize Training Module	Martin	NV-950	6/30/90	7/31/90		Package	Approved by WO-771	See P&O 2.8.2
8.2.8.2	Conduct Training	Martin	NV-950	7/31/90	9/30/90		Evaluation	Approved by WO-771	See P&O 2.8.2
8.2.9	Evaluate Inventory System	Martin	M.Martin, WO-771	9/1/91	10/1/91		Report	Approved by WO-771	

Task Title: 8.3 Integration of Paperwork Management System into Target

April, 1990

Task Manager: Wendy Spencer SC-324

Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
8.3.1	Evaluate Target System Impacts to Paperwork Mgmt. System	Molinar	Riley, Martin	9/1/90	12/1/90		Report	Report Received by WO-771, WO-855	
8.3.2	Develop Plans for Affected Paperwork Mgmt. System Impacts	Molinar	R.Molinar, Riley, Martin	2/1/90	4/1/90		Plans	Approval by WO-771, WO-855	
8.3.3	Develop Paperwork Mgmt. System Guidance and Instructions	Cummins	SC-324, WO-855	5/1/90	1/1/91		Manuals, IMs, Handbook	Approval by WO-771, WO-855	See P&O 2.8.3

9 Information/Data Integrity Planning Strategy

As the Bureau moves farther into the arena of modernization, data or information will become more recognized as a valuable resource to be managed and used. As this fact reaches its level of prominence, it becomes imperative that a process for evaluating the quality of the data and the data base, known as Quality Assurance (QA), and the quality of the change to the data base, known as Quality Control (QC), be implemented. The following are the major actions that are necessary to achieve this activity:

a. Define acceptable quality levels for all mandatory base line programs, i.e., Status, LLD, Case Recordation, Mining Claim Recordation, Master Name, etc.
b. Develop and implement sampling plans and techniques for all base line files/systems and programs, including data collection and maintenance procedures.
c. Develop and implement W.O. program standards, guided by sampling plan criteria and methods, as well as computer edits.
d. Determine data sampling priorities and identify automation candidates.
e. Provide guidance to State Offices, including formats for data preparation plans.
f. Define and document existing data quality on a State-by-State basis.
g. Establish points of accountability and determine and define Job Description and PIPR input.
h. Determine level of quality currently found in manual record systems.

A. Assumptions-

- Standards for "Corporate" data will be developed and enforced.

- The Bureau will establish and manage its data at an acceptable quality level.

B. Policy Considerations-

- Managers and employees must be held accountable for the overall management and quality of the Bureaus' data and information. Policy must be developed to establish quality levels and QA/QC procedures.

9.1 Data Integrity Plan

Task Manager: Gene Russell WO-704

This task involves the initial development of a draft Data Integrity Plan including the development of policy, identifying systems for quality assurance sampling, conducting tasks of the sampling plans, and implementing a Bureauwide sampling effort.

A. Assumptions-

- Management will support a Bureauwide sampling effort for Case Recordation (CR), Mining Claim Recordation (MCR), and Legal Land Description in FY 90.

- Implementation will initially create a large workload in the States.

- o An acceptable data quality level for the CR and MCR systems can be identified and management support will be provided to manage the data at the acceptable level.

B. Policy Considerations-

- o No policy exists to authorize the development and enforcement of an overall quality acceptance level.

9.2 Perform QC Computer Editing (Match/Merge)

Task Manager: Tom Adler SC-322

This task involves the development, operation, and maintenance of computer software to perform edits within and between the following data files and systems:

1 - Legal Land Description (LLD) Data Files
2 - Status Data Files
3 - Case Recordation Systems (CR)
4 - Mining Claim Recordation (MCR)

This software primarily compares land descriptions in items 2, 3, and 4 to that contained in the LLD data file (item 1). In addition, edits are incorporated to validate geopolitical data such as District, Resource Area, Congressional District, and Surface Management codes. The programs are complex and sophisticated and are released through the Service Center.

A. Assumptions-

- o LLD and Status data files will be edited on State DPS6+'s, with the exception that Montana and Wyoming may continue to operate the Match/Merge software on their Primes through February 1991.
- o Arizona will coordinate a LLD and Status Match/Merge release with the Service Center to operate on State DPS6+'s. Once the programs are loaded and operational in the States, O&M is the responsibility of the Service Center.
- o The Service Center will develop, operate, and maintain a CR and MCR edit program to run on the SC Prime and will provide an edit service to all States.
- o LLD and Status editing will be funded by 4550.
- o CR and MCR editing will be funded by benefitting activities.

B. Policy Considerations-

- o The Field Committee and IRMAC must confirm these assumptions and assign responsibilities.

Task Title: 9.1 Data Integrity Plan

April, 1990

Task Manager: Gene Russell WO-704

Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
9.1.1	Develop Policy	G.Russell, WO-704	J.Moeller	12/1/89	2/1/90		Policy	Approved by WO-700	
9.1.2	Prepare Draft Integrity Plan	G.Russell, WO-704		10/15/89	11/1/89		Integrity Plan Strategy	Accepted by WO-704	
9.1.3	Set Sampling Base Line for CR, MCR, LLD, etc.	G.Russell, WO-704,	M.Thompson	11/1/89	11/15/89	Data Tasks 4.1-4.4, 4.7	QA Plan	Accepted by WO-704	
9.1.4	Pilot Sample in New Mexico for MCR and CR	G.Russell, WO-704	M.Thompson, R.Gonzales	12/15/89	3/23/90	Data Tasks 4.1-4.4, 4.7	Pilot Review	Accepted by SC-320	
9.1.5	Design Sampling & Redesign Criteria	M.Garrett, SC-310	G.Russell, M.Thompson	4/1/90	4/13/90		Sample Criteria	Algorithm certified by M. Thompson	ALMRS Data will be used
9.1.6	Run State Sampling Selections for MCR and CR	M.Thompson, SC-322	J.Carlander	4/16/90	4/27/90		State Runs	Complete State Runs	
9.1.7	State Sampling Delivered	M.Thompson, SC-322		4/27/90	4/30/90		Runs Delivered	State Accepted	
9.1.8	State Inspect Samples	SODAs	SODAs	5/1/90	6/29/90		Error Reports	Error Review by SDAs	
9.1.9	Complete Statistics	G.Russell, WO-704	M.Thompson	6/29/90	7/13/90		Stat. Analysis	Stat. Accepted by WO-704	
9.1.10	Overall Evaluation	WO-704, DV-320	G.Russell, M.Thompson	5/5/90	6/15/90	SODAs	Evaluation	Plan Redraft	

Task Title: 9.1 Data Integrity Plan

Task Manager: Gene Russell WO-704

Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
9.1.11	Develop PIPRs	WO-704	J.VanWyhe	5/20/90	6/1/90	SODAs	SC-320	PIPRs	PIPR Accepted
9.1.12	Draft QA-QC Manual Release	WO-704	J.VanWyhe	5/20/90	6/15/90	SODAs, SC-320	Draft Manual	Manual Review	
9.1.13	Revision of Draft Manual	WO-704	J.VanWyhe	6/15/90	6/30/90	SODAs, SC-320	Revised Manual	Revised Manual Accept	
9.1.14	Issue QA-QC Manual	WO-704	J.VanWyhe	7/1/90	9/1/90	SODAs, SC-320	QA-QC Manual	Manual Distribution	

Task Title: 9.2 Perform QC Computer Editing (Match/Merge)

Task Manager: Tom Adler SC-322

Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
9.2.1	Release 3.2 of Status/LLD Match/Merge for Primes	T.Adler, SC-322		3/12/90	3/16/90	Data 5.0; Tech 8.2	Release Tape	Release Tested	
9.2.2	Support Prime Match/Merge for Montana and Wyoming	T.Adler, SC-322	R.Dickman, D.O'Mera	12/1/89	9/30/91	Funding	Bug Fixes	4550 Funding Approved	
9.2.3	Test and Release DPS6+ Status and LLD Match/Merge in New Mexico	F.Wylie, AZ-930; T.Adler, SC-322	R.Gonzales	1/22/90	2/2/90	DPS6+ Availability, Data 5.0, Funding	M/M Program	Test Results	
9.2.4	Release DPS6+, LLD, and Status and Conduct Training; UT, NV, CA, OR, ID, MT, CO, WY	T.Adler, SC-322; F.Wylie, AZ-930; V.Kramer, AZ-940	ALMRS Coordinators, State Data Administrators	3/19/90	9/30/90	DPS6+ Availability, Funding	M/M Program	4550 Funding Approved	
9.2.5	Service Center Assumes DPS6+ Status and LLD M/M O&M	J.Strong, SC-340; T.Adler, SC-322		9/30/90	9/30/93	Data 5.0, Tech 8.2	M/M Program	Tested and Accepted	
9.2.6	Develop CR and MCR M/M for SC Prime	T.Adler, SC-322		3/26/90	5/1/90	Data 5.0, SC Prime Availability, Tech 8.6	M/M Program	Tested and Accepted	
9.2.7	Run States CR and MCR at SC and Issue Results to States	T.Adler, SC-322	SC-322 Staff, ALMRS Coord. SDAs	5/1/90	9/30/93	Data 5.0, SC Prime Availability, Subactivity Funding	State edits reports	States Modify Data	

BLM Library
Denver Federal Center
Bldg. 85, OC-521
P.O. Box 25047
Denver, CO 80225

The Bureau of Land Management

Master Plan for Automation

Technology

For Further Information,
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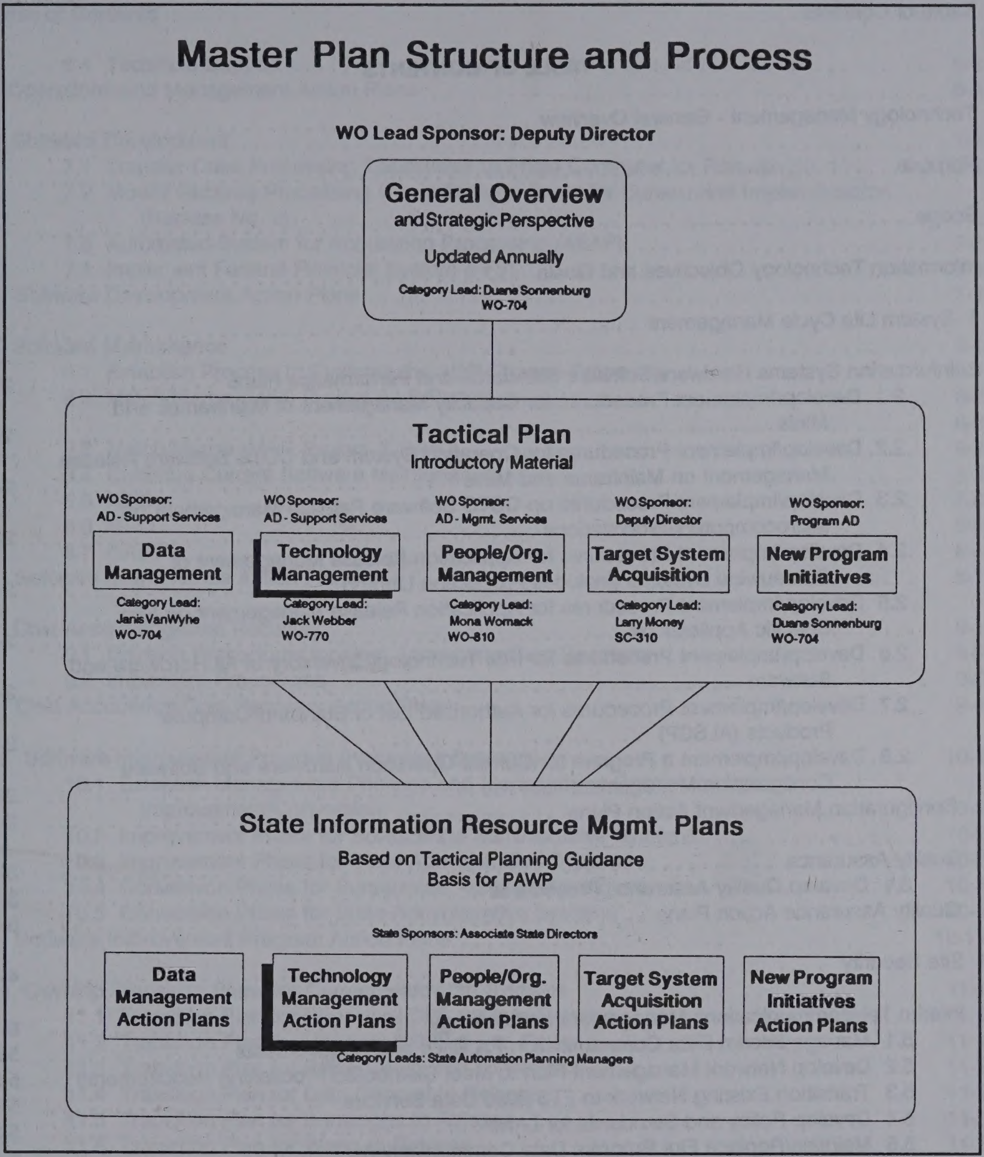
FTS 343-3897


Master Plan Structure and Process
WO Lead Sponsor: Deputy Director
General Overview
and Strategic Perspective
Updated Annually
Category Lead: Duane Sonnenburg
WO-704
Tactical Plan
Introductory Material
WO Sponsor:
AD - Support Services
Data Management
Category Lead:
Janis VanWyhe
WO-704
WO Sponsor:
AD - Support Services
Technology Management
Category Lead:
Jack Webber
WO-770
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Larry Money
SC-310
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New Program Initiatives
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Duane Sonnenburg
WO-704
State Information Resource Mgmt. Plans
Based on Tactical Planning Guidance
Basis for PAWP
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Technology Management - General Overview

Purpose

This section of the Master Plan for Automation identifies activities required to manage the Bureau's information technology resources through the interim period, which will continue through acceptance of the Target System components at each site. Information technology provides the tools for data management and requires information about data collection schedules, data volume, processing, and storage requirements on a site by site basis, and data sharing/exchange strategies from the Data Management section of the Master Plan. Information security and access procedures defined in the Data Management and Target System Acquisition Sections will be implemented by managing site and system security that are addressed in this plan. Staffing, skills, and training requirements to manage information technology are addressed in the People/Organization Section of the Master Plan. Requirements for management of current and interim period information technology capabilities through testing and acceptance of the Target System are addressed in the Target System Acquisition Section of the Master Plan.

Scope

Information Technology Management includes the following functions, which apply to the hardware, software, and telecommunications resources of the BLM:

- capacity planning and management, including configuration management and cost accounting/recovery;
- information systems development and implementation;
- information systems maintenance and management;
- information technology and services procurement;
- information technology standards program;
- technical support to other BLM programs;
- life cycle management for systems and applications;
- data base administration;
- site and system security;
- short- and long-range acquisition planning;
- office automation.

Information Technology Objectives and Goals

The goals of information technology in the interim period are to continue operation and management of current systems and to provide the technological resources to prepare the Bureau's data and people for the modernized environment that will be provided by the Target System. Acquisition of technology resources in the interim period will meet the objective of maintaining current capability to serve the Bureau's resource management and administrative programs. Management practices in the areas of life cycle management capacity planning and management, configuration management, cost recovery, quality assurance, and site and system security will be defined for the interim time period. Implementation of these procedures on a Bureauwide basis will provide a management environment compatible with the Target System.

1 System Life Cycle Management

RESERVED

2 Information Systems Hardware/Software Standards and Performance Plans

In accordance with Bureau LCM policy, develop the standards and performance planning tools necessary to ensure effective management of all existing hardware and software systems. The specific tools/plans will be written in BLM Manual format encompassing all systems which currently fall within LCM. The plans will be written to include hardware and software systems that are currently maintained by government employees, developed and maintained by contract employees, and any combination of the two.

A. Assumptions-

- QA will monitor developers and users adherence to standards and performance plans.
- Extensive use of COTS software.
- Availability of workmonths and funding.
- A single standard inventory package will be used throughout the Bureau.

B. Policy Considerations-

- LCM policy will define relationships between it and standards and performance plans.

2.1 Develop/Implement Procedures for Capacity Management of Mainframes and Minis

Task Manager: Joe Strong, SC-340

This activity involves defining Bureauwide capacity management procedures capable of reporting existing workload and forecasting future systems workload. It also defines the software tools, criteria, and procedures on all mainframe and minicomputer platforms as well as data communications networks. The information and statistics included in this activity will address the requirements and usage statistics needed for cost recovery.

A. Assumptions-

- Configuration management policies will be adopted and accepted by Bureau managers with well defined evaluation and review procedures in place to properly enforce the policy.
- Software tools will be available and acquired for all platforms.
- Contractor support may be required.

B. Policy Considerations-

- Development of standard facility operating procedures.
- Refinement of the ADP/telecommunications acquisition policy to require performance evaluations as a substantial part of the justifications and requirements analysis.

- Refinement of the LCM policy to address capacity statistics during the development and implementation process.
- Requirement that program offices requiring new development and implementation fund the upfront costs of systems upgrades to support their applications.

2.2 Develop/Implement Procedures for Operating System and COTS Software Release Management on Mainframe and Minis

Task Manager: Joe Strong, SC-340

This task will define the centralized process, procedures, responsibilities, and schedules for releasing software updates, patches, and new releases form the time they are received from the vendors. The procedures will include test plans, evaluation against current production systems, establishment of beta test sites, documentation of beta test results, formal announcement of their lease to all sites, establishment of firm cutover dates, and establishment of a formal difficulty reporting system. These procedures will apply to the mainframe and all minicomputer systems in the Bureau.

A. Assumptions-

- Configuration management policies will be adopted and accepted by Bureau managers with well defined evaluation and review procedures in place to properly enforce the policy.

B. Policy Considerations- None Identified

2.3 Develop/Implement Procedures on COTS Software Release Management on Microcomputers/Workstations

Task Manager: Dennis Anderson, WO-773

This task will define the centralized process, procedures, responsibilities, and schedules for releasing software updates, patches, and new releases from the time they are received from the vendors. The procedures will include test plans, evaluation against current production systems, establishment of beta test sites, documentation of beta test results, formally announcing the release to all sites, establishing firm cutover dates, and establishing a formal difficulty reporting system. These procedures will apply to all microcomputer systems used for Bureauwide microcomputer based applications including those used for remote job entry.

A. Assumptions-

- Configuration management policies will be adopted and accepted by Bureau managers with well defined evaluation and review procedures in place to properly enforce the policy.
- Similar procedures will be developed at the field sites and used for locally managed systems at the District, Resource, and State office levels.

B. Policy Considerations-

- o Develop policy on managing COTS releases and updates.
- o Process for test and evaluation of new products tied to functional requirements.

2.4 Develop/Implement Procedures for Application Release Management of Bureauwide Systems (Includes Production Library)

Task Manager: Joe Strong, SC-340

This task will define the centralized process, procedures, responsibilities, and schedules for releasing software updates, patches, and new releases of applications software from the time they are developed or modified until they are released for production. The procedures will include test plans, evaluation against current production systems, establishment of beta test sites, documentation of beta test results, formally announcing the release to all sites, establishing a firm cutover date, and establishing a formal difficulty reporting system. These procedures will apply to the mainframe, all minicomputer systems, and all microcomputer systems used for Bureauwide microcomputer based applications including those used for remote job entry.

A. Assumptions-

- o Configuration management policies will be adopted and accepted by Bureau managers with well defined evaluation and review procedures in place to properly enforce the policy.
- o Similar procedures will be developed at the field sites and used for locally managed systems at the District, Resource, State Office, Washington Office, and BIFC.

B. Policy Considerations- None Identified

2.5 Develop/Implement Procedures for Application Release Management on Site Specific Applications

Task Manager: Joe Strong, SC-340

This task will define the centralized process, procedures, responsibilities, and schedules for releasing software updates, patches, and new releases of applications software from the time they are developed or modified until they are released for production. The procedures will be developed by the SC and implemented at the field sites. They will be used for locally managed systems at the District, Resource, and State Office levels. They will include test plans, evaluation against current production systems, establishment of beta test sites, documentation of beta test results, formal announcement of the release to all sites, establishment of a firm cutover date, and establishment of a formal difficulty reporting system. These procedures will apply to all minicomputer systems and all microcomputer systems used for local site specific microcomputer based applications including those used for remote job entry.

A. Assumptions-

- Configuration management policies will be adopted and accepted by Bureau managers with well defined evaluation and review procedures in place to properly enforce the policy.
- SC supported applications.

B. Policy Considerations-

- Develop procedures at the field sites and used for locally managed systems at the District, Resource, State Office, Washington Office, and BIFC.

2.6 Develop/Implement Procedures for IRM Technology Inventory of All Hardware and Software

Task Manager: Dennis Anderson, WO-773

This task will include developing the requirements, policy, responsibilities, software, and procedures for maintaining accurate inventories of the Bureau's technology assets. The inventory will provide a data base for managing ADP and telecommunications assets, establish proper accountability for these assets, assist in determining future needs, trends, acquisition requirements, information reporting, systems sharing, and application sharing possibilities and avoid unnecessary duplication of systems. It will assist in the analysis and tracking of ADP and telecommunications resource costs, help to identify obsolete or excess equipment, help identify equipment for utilization elsewhere in the Bureau, and help decision making regarding lease versus purchase. The system will allow quick identification of ADP telecommunications resources which can be reallocated, shared, or used to increase compatibility between offices. Further, the system will establish the basis for configuration management of all hardware and software items.

A. Assumptions-

- Configuration management policies will be adopted and accepted by Bureau managers with well defined evaluation and review procedures in place to properly enforce the policy.
- Bureau requirements will be defined and documented.
- Requirements for strategic planning, budgeting, and Bureauwide reporting as well as the operational requirements of individual BLM sites will be considered (analyzed) when establishing the hardware/software system.
- Policy and procedures will be developed.
- Commercial off-the-shelf software will be available to meet both Bureau and local requirements.
- Standard data elements, descriptions, and codes will be defined and agreed upon.
- Funding will be available for centralized acquisition and distribution.
- Proper approvals will be granted and procurement policies will be satisfied.

- Funding and workmonths will be available to implement.
- Date requirements have been included in the logical data modeling of Technical Service Administrative component data.

B. Policy Considerations-

- A manual section stating policy and responsibilities for inventories needs to be developed.
- Review of the property management policies to flush out possible overlaps and duplications.

2.7 Develop/Implement Procedures for Authorized List of Standard Computer Products (ALSCP)

Task Manager: Joe Strong, SC-340

This task involves the development of lists of standards, items, or products identified and adopted for system upgrades and add-on items. Product availability lists shall be developed and maintained for the minicomputer, mainframe, and telecommunications systems listing the standard items approved for hardware, software (including COTS), and firmware upgrades and/or enhancements. Standard commercial off-the-shelf hardware and software lists will be developed and maintained for microcomputers listing items approved for acquisition, upgrades, or enhancements. The lists will include the product description, cost, monthly maintenance cost, and product number. The lists will be available through the inventory system to provide consistency in codes, descriptions, and pricing and thus reduce updating workload for the field locations.

A. Assumptions-

- Configuration management policies will be adopted and accepted by Bureau managers with well defined evaluation and review procedures in place to properly enforce the policy.
- Commercial off-the-shelf inventory software will be available to meet both Bureau and local requirements.
- Standard data elements and descriptions will be defined, agreed upon, and included in the logical data model.
- Procurement vehicles will be in place and used as a source for developing the lists.
- Additional categories for standards will be determined and adopted.

B. Policy Considerations-

- Compliance with all existing procurement regulations.
- Interim procurements/contracts to support requirements prior to deployment of the target system.

- Develop the policy, process, and methodology for adopting de facto standards and gain acceptance from the WO procurement staff.

2.8 Develop/Implement a Program for Current Operation Hardware and Software Configuration Management

Task Manager: Joe Strong, SC-340

Develop hardware and application/operating system software configuration management plans to control ADP systems throughout pertinent portions of their respective life cycles. Plans will include interface, review, audit, and control of specifications, requirements, design, coding, testing, operation and maintenance, baseline designations, etc. Hardware and software systems will be subject to Quality Assurance scrutiny while under configuration management control.

A. Assumptions-

- Availability of workmonths and funding.

B. Policy Considerations-

- LCM policy will define relationships between it and the configuration management program.

Task Title: 2.1 Develop/Implement Procedures for Capacity Management on Mainframes and Minis April 1990

Task Manager: J. Strong, SC-340

Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
2.1.1	Develop Requirements Document	Horak	SC-340/WO-773 Contractor	TBD	TBD		Requirements Document		
2.1.2	Test/Evaluate Pilot (Prime)	Horak	SC-340 Contractor	TBD	TBD				
2.1.3	Test/Evaluate Pilot (Honeywell 6+)	Horak	SC-340 Contractor	TBD	TBD				
2.1.4	Develop Capacity Management Procedures for the Honeywell DPS-8000	Horak	SC-340 Contractor	01/89	TBD				
2.1.5	Develop Capacity Management Procedures for the Honeywell DPS-6+	Horak	SC-340 Contractor	11/89	TBD				
2.1.6	Develop Capacity Management Procedures for the Prime	Horak	SC-340 Contractor	12/89	TBD				
2.1.7	Develop Capacity Management Procedures for the Target System	Horak	SC-340/SC-310 Contractor	TBD	TBD				
2.1.8	Develop Bureau Manual	Horak	SC-340/WO-773 Contractor	TBD	TBD		Bureau Manual		
2.1.9	Implement Procedures at Service Center	Horak	SC-340/SC-310	TBD	TBD				
2.1.10	Implement Procedures Bureauwide	Horak	SC-340, SO, BIFC, WO-774	TBD	TBD				

Task Title: 2.2 Develop/Implement Procedures for Operating Systems/COTS Releases Management on Mainframes and Minis
Task Manager: Joe Strong, SC-340

Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
2.2.1	Develop Requirements Document	Horak	SC-340 Contractor WO-773	TBD	TBD		Requirements Document		
2.2.2	Develop Procedures for DPS-8000	Horak	SC-340 Contractor	TBD	TBD		IM		
2.2.3	Develop Procedures for DPS-6+	Horak	SC-340 Contractor	08/89	TBD		IM		
2.2.4	Develop Procedures for Prime	Horak	SC-340 Contractor	01/90	TBD		IM		
2.2.5	Develop Procedures for Target System	Horak	SC-340 SC-310 Contractor	TBD	TBD		IM		
2.2.6	Develop Bureau Manual	Horak	SC-340 Contractor WO-773	TBD	TBD		Bureau Manual		
2.2.7	Implement Procedures at Service Center	Horak	SC-340 SC-310	TBD	TBD				
2.2.8	Implement Procedures Bureauwide	Horak	SC-340, SO, BIFC, WO-774	TBD	TBD				

Task Title: 2.3 Develop/Implement Procedures for Operating Systems/COTS Release Management on Microcomputers April 1990

Task Manager: Dennis Anderson, WO-773

Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
2.3.1	Develop Requirements Document	Horak	SC-340 Contractor WO-773	TBD	TBD		Requirements Document		
2.3.2	Develop Procedures for PCs	Horak	SC-340 Contractor	TBD	TBD				
2.3.3	Develop Procedures for Work Stations	Horak	SC-340 Contractor	TBD	TBD				
2.3.4	Develop Bureau Manual	Horak	SC-340 Contractor WO-773	TBD	TBD		Bureau Manual		
2.3.5	Implement Procedures at Service Center	Horak	SC-340 SC-310	TBD	TBD				
2.3.6	Implement Procedures Bureauwide	Horak	SC-340, SO, BIFC, WO-774	TBD	TBD				

Task Title: 2.4 Develop/Implement Procedures for Application Release Management of Bureauwide Systems April 1990

Task Manager: Joe Strong, SC-340

Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
2.4.1	Develop Requirements Document	Horak	SC-340 Contractor WO-773	TBD	TBD		Requirements Document		
2.4.2	Develop Procedures for Honeywell DPS-8000	Horak	SC-340 Contractor	09/89	TBD	Completion of Configuration Management Plan			
2.4.3	Develop Procedures for DPS-6+	Horak	SC-340 Contractor	12/89	TBD	Completion of Configuration Management Plan			
2.4.4	Develop Procedures for Prime	Horak	SC-340 Contractor	TBD	TBD	Completion of Configuration Management Plan			
2.4.5	Develop Procedures for PCs/Workstations	Horak	SC-340 Contractor	TBD	TBD	Completion of Configuration Management Plan			
2.4.6	Develop Bureau Manual	Horak	SC-340 Contractor WO-773	TBD	TBD		Bureau Manual		
2.4.7	Implement Procedures at Service Center	Horak	SC-340 SC-310	TBD	TBD				
2.4.8	Implement Procedures Bureauwide	Horak	SC-340, SO, BIFC, WO-774	TBD	TBD				

Task Title: 2.5 Develop/Implement Procedures for Application Release Management on Site Specific Systems April 1990

Task Manager: Joe Strong, SC-340

Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
2.5.1	Develop Requirements Document	Horak	SC-340 Contractor WO-773	TBD	TBD		Requirements Document		
2.5.2	Develop Procedures for Honeywell DPS-8000	Horak	SC-340 Contractor	09/89	TBD	Completion of Configuration Management Plan			
2.5.3	Develop Procedures for DPS-6+	Horak	SC-340 Contractor	12/89	TBD	Completion of Configuration Management Plan			
2.5.4	Develop Procedures for Prime	Horak	SC-340 Contractor	TBD	TBD	Completion of Configuration Management Plan			
2.5.5	Develop Procedures for PCs/Workstations	Horak	SC-340 Contractor	TBD	TBD	Completion of Configuration Management Plan			
2.5.6	Develop Bureau Manual	Horak	SC-340 Contractor WO-773	TBD	TBD		Bureau Manual		
2.5.7	Implement Procedures at Service Center	Horak	SC-340 SC-310	TBD	TBD				
2.5.8	Implement Procedures Bureauwide	Horak	SC-340, SO, BIFC, WO-774	TBD	TBD				

Task Title: 2.6 Develop/Implement Procedures for IRM Technology Inventory of all (Hardware and Software)
Task Manager: Dennis Anderson, WO-773

April 1990

Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
2.6.1	Determine Inventory Requirements	Anderson	IRMAC, SC-310, SC-320, SC-340	03/90	06/90		Report	IRMAC Review	
2.6.2	Pilot COTS Package	Elven (OR-955)	Oregon DO	03/90	08/90		Report	770 Review	
2.6.3	Evaluate or Pilot	Anderson	WO-772	09/90	10/90		Decision	Webber Signature	
2.6.4	Write Bureau Manual	Anderson	SC-310, SC-320, SC-340, WO-773	10/90	TBD	Funding	Manual	Director Signature	
2.6.5	Implement Procedures Bureauwide	SO, SC, BIFC, 774		11/90	TBD	Funding	IM Management Reports		

Task Title: 2.7 Develop/Implement Procedures for Authorized List of Standard Computer Products

Task Manager: Joe Strong, SC-340

Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
2.7.1	Develop Requirements Document	Horak	SC-340 Contractor	03/90	TBD		Requirements Document		
2.7.2	Test Pilot COTS Package (Prime)	Horak	SC-340 Contractor	TBD	TBD				
2.7.3	Evaluate Pilot (Prime)	Horak	SC-340 Contractor	TBD	TBD				
2.7.4	Develop Procedures	Horak	SC-340 Contractor	TBD	TBD				
2.7.5	Develop Bureau Manual	Horak	SC-340 Contractor WO-773	TBD	TBD		Bureau Manual		
2.7.6	Implement Bureauwide	Horak	SC-300, SO, BIFC, WO-774	TBD	TBD				

Task Title: 2.8 Develop/Implement a Program for Current Operating Hardware and
and Software Configuration Management
Task Manager: Joe Strong, SC-340

Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
2.8.1	Develop Plan for Hardware	Horak	SC-340 SC-310 Contractor	TBD	TBD		CM Plan		
2.8.2	Develop Procedures for Hardware	Horak	SC-340 SC-310 Contractor	TBD	TBD				
2.8.3	Develop Bureau Manual for Hardware	Horak	SC-340 SC-310 Contractor WO-773	TBD	TBD		Bureau Manual		
2.8.4	Implement CM at SC-340 Division Level	Horak	SC-340 SC-310 Contractor	TBD	TBD				
2.8.5	Implement CM at SC-300 SC Level	Horak	SC-340 SC-310 Contractor	TBD	TBD				
2.8.6	Develop Plan for Application Software	Horak	SC-340 SC-310 Contractor	03/90	TBD		CM Plan		
2.8.7	Develop Procedures for Application Software	Horak	SC-340 SC-310 Contractor	TBD	TBD				
2.8.8	Develop Bureau Manual for Application Software	Horak	SC-340 SC-310 Contractor WO-773	TBD	TBD		Bureau Manual		
2.8.9	Implement CM at SC-340 Division Level	Horak	SC-340 SC-310 Contractor	TBD	TBD				

Task Title: 2.8 Develop/Implement a Program for Current Operating Hardware and and Software Configuration Management
Task Manager: Joe Strong, SC-340

Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
2.8.10	Implement CM at SC-300 SC Level	Horak	SC-340 SC-310 Contractor	TBD	TBD				
2.8.11	Develop Plan for Operating System	Horak	SC-340 SC-310 Contractor	TBD	TBD		CM Plan		
2.8.12	Develop Procedures for Operating System Software	Horak	SC-340 SC-310 Contractor	TBD	TBD				
2.8.13	Develop Bureau Manual for Operating System Software	Horak	SC-340 SC-310 Contractor WO-773	TBD	TBD		Bureau Manual		
2.8.14	Implement CM at SC-340 Division Level	Horak	SC-340 SC-310 Contractor	TBD	TBD				
2.8.15	Implement CM at SC-300 SC Level	Horak	SC-340 SC-310 Contractor	TBD	TBD				

3 Quality Assurance

Quality Assurance is a planned and systematic pattern of all actions necessary to provide adequate confidence that the configuration items placed under configuration management conform to established technical requirements and standards.

The tasks of quality assurance are conducted following the guidelines outlined in: (1) the procedures to monitor the development processes of software development to ensure that baselines are followed, methods of design are acceptable, and that standards are followed; (2) the procedures for conducting formal reviews and audits to ensure that requirements are being met and that standards are followed; and (3) the procedures for conducting the formal qualification test as an independent test to verify that the actual performance of a configuration item of the system complies with developmental specifications as identified in the Software Requirements Specifications (SRS) and the Interface Requirements Specifications (IRS) prior to delivery. Where developmental testing is an indication that the software executes satisfactorily, the formal qualification test focuses primarily on whether the software meets user requirements.

3.1 Develop Quality Assurance Procedures

Task Manager: Joe Strong, SC-340

The scope of quality assurance shall encompass all phases of interim software development, software testing, documentation, implementation, and software/hardware evaluation.

Procedures shall be developed as a guideline for monitoring the development of software beginning with the identification of system requirements and proceeding through the development of software and interface requirements, preliminary and detailed design, unit testing, system testing, interoperability testing, formal qualification testing, and operational test and evaluation.

Procedures shall be developed as a guideline for conducting formal reviews and audits during the software development phases identified by the DOD MIL-STD 2167A.

Procedures shall be developed as a guideline for conducting formal qualification testing as an independent test in compliance with the DOD MIL-STD 2167A.

A. Assumptions-

- o That the Bureau will require commitment to compliance with set requirements and standards throughout the Bureau.
- o Funding will be available for all tasks.
- o That the responsibilities of quality assurance be communicated throughout the Bureau.
- o Contractor support will be required.
- o That formal qualification testing will be centralized for an independent test and placed as a responsibility of quality assurance.
- o That FTE will be made available to complete the independent testing.

- That the discipline of quality assurance be placed within the Bureau in such a way that quality assurance shall not report directly to a group or manager which may be subject to quality assurance audits and/or reviews.
- That a formal qualification test will be conducted on each software before delivery.

B. Policy Considerations-

- Modify or refine existing policies to show the relationships between software development testing, configuration management tasks, and quality assurance verification and validation.
- Formalize a process to identify responsibilities.
- Modify existing policies to place the responsibility of an independent formal qualification test for all software with quality assurance.
- That the term "life cycle management" be defined and the use of life cycle management be consistent throughout the Bureau.
- That the term "configuration management" be defined and the use of configuration management be consistent throughout the Bureau.
- That complete standards be adopted, documented, and used throughout the Bureau.

Task Title: 3.1 Develop Procedures to Conduct Quality Assurance Disciplines

April 1990

Task Manager: Joe Strong, SC-340

Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
3.1.1	Identify Requirements for Implement a Quality Assurance Program	Horak	SC-310, SC-340, WO-770	03/90	TBD				
3.1.2	Develop Procedures to Monitor the Processes of Software Development/Hardware Installations	Horak	SC-310, SC-340	TBD	TBD				
3.1.3	Develop Procedures to Conduct Formal Reviews and Audits	Horak	SC-310, SC-340	TBD	TBD				
3.1.4	Develop Procedures to Conduct Independent Formal Qualification Testing	Horak	SC-310, SC-340	TBD	TBD				
3.1.5	Implement a Quality Assurance Program for SC-340	Horak	SC-310, SC-340	TBD	TBD				
3.1.6	Implement a Quality Assurance Program for SC-300	Horak	SC-310, SC-320, SC-340	TBD	TBD				
3.1.7	Implement a Quality Assurance Program at Each State Office, BIFC, WO-774	Horak	SC-340, SO, BIFC, WO-773	TBD	TBD				
3.1.5	Develop/Implement Procedures for Software/Hardware Evaluation	Strong	Deuter						

4 Site Security

RESERVED

5 Interim Telecommunications Management and Strategy

Washington Office 770 is responsible for oversight and coordination in this effort and is also responsible for rewriting Section 5 of this document as necessary to reflect the necessary changes for Version 4.

There are several activities and situations exerting strong influence on the Bureau to undertake major changes to its current data communications activities and operating procedures during the interim period between now and the implementation of the Target System. They are:

1. Public Law 101-136 which mandates the use of FTS 2000 for data communications.
2. The increased requirement to transmit large volumes of graphic data between remote locations.
3. The substandard condition of the main multiplexors supporting the current network connecting the Service Center General Computer Center and the State Office Computer Centers. These devices are in excess of 12 years old, manufacturer discontinued, and almost unsupportable for spare parts and technical repair.

However, the management study currently reviewing the roles and responsibilities of the Washington Office and the Service Center makes premature the long-term assignments specified in this document.

At this time, the Service Center has completed an internal study into the advisability and practicality of shoring up the existing network. Simultaneously, they are overseeing a contracted effort to develop alternatives to replace the existing network with new equipment and technology, using the FTS-2000 as the carrier. This second study is scheduled for completion on or before March 31, 1990. The telecommunications managers of the Bureau are scheduled to meet during the interval (week of March 12, 1990). The Bureauwide data communications topic represents a major portion of their agenda.

During the months of April and May 1990, the Washington Office and the Service Center, in cooperation with the State Telecommunications Managers, will prepare for management review and action a plan for efficient, cost effective, Bureauwide data communications support to meet our needs during the interim period.

Interim Telecommunications Management and Strategy describes the management of network facilities required for existing and interim program requirements. The activity modernizes the existing communications facilities and supports the Bureau's transition to distributed processing. FFS, FPPS, Interim LIS, and SLMS II are dependent on this activity. The activity also satisfies overdue maintenance requirements.

This activity also consists of managing voice (telephone and radio) communications in the Bureau. Management of telephone service for the Bureau continues to be a challenge with the requirement for using FTS-2000 services and the concurrent upgrade of analog equipment to digital equipment.

The current Star network is aging and rapidly approaching technological obsolescence. Replacement or augmentation of the network is necessary to safeguard network reliability and satisfy new functional and connectivity requirements. Both options will be considered.

Replacement of the network by a packet switched network will be outlined in a data communications study being prepared by the National Telecommunications and Information Agency (NTIA). The study will define a recommended architecture which will interconnect BLM facilities at the Service Center, the BLM Washington Office, the DOI Administrative Service Center, and the BOR Administrative Service Center. Prime and Honeywell and BOR IBM equipment will be interconnected through the State Office level.

Augmentation of the existing network will be detailed in an in-house report with identical requirements.

The interim network must be maintained until the complete conversion of Prime and Honeywell application programs on the new Target platform. This will require the maintenance of both the Interim and Target networks during the transition phase.

This activity consists of managing voice (telephone and radio) communications in the Bureau. Management of telephone service for the Bureau continues to be a challenge with the requirement for using FTS-2000 services and the concurrent upgrade of analog equipment to digital equipment.

5.1 Manage Interim Data Communication Facilities and Requirements

Task Manager: Joe Strong, SC-340

- Interim network system design/review.
- Budgetary review and resource/requirements determination.
- Interim network implementation.
- Implement network access for FFS as funded.
- Implement network access for the FPPS as funded.
- Implement network access for Interim LIS as funded.
- Implement network access for BRASS platform at Minerals Management Service as funded.
- Implement network access for SLMS II as funded.
- Maintain/replace Honeywell data communications.
- Maintain/replace Prime data communications.

A. Assumptions-

  - Interim network is considered "throw-away" at Target release.
  - Configuration management activities will encompass data communications.
  - Additional FTE will be needed.

B. Policy Considerations-

- Need decisions on network selection after funding

5.2 Develop Network Management Plan to Meet Distributed Processing Requirements

Task Manager: Joe Strong, SC-340

This activity describes implementation of standards based network management throughout the Bureau. New requirements for distributed processing between the Service Center and the States have strained the current system of separate management for Star and State networks. Coordinated management is required for extended networking requirements and standardized management of the network.

- Develop centralized network policies and procedures.
- Implement network management plan.

A. Assumptions-

- Three additional FTE will be needed.

B. Policy Considerations-

- Need decisions on additional FTE and general guidance surrounding network management.

5.3 Transition Existing Network to FTS-2000 Data Services

Task Manager: Joe Strong, SC-340

The activity encompasses the mandatory migration of the BLM wide area network to FTS-2000 data services.

- Inventory existing service.
- Identify equivalent FTS-2000 services.
- Develop implementation schedule.
- Install FTS-2000 data communications service.

A. Assumptions-

- The Star network will be transitioned to FTS-2000 services when service is available to all nodes on the network.

B. Policy Considerations-

- Policies on coordinating FTS-2000 services need to be developed.

5.4 Develop Policy and Standards for LANs

Task Manager: E. Harne, UT-954, Representing the LAN Subcommittee

- Baseline installed LANs.

- Identify and consolidate LAN issues.
- Develop LAN recommendations for Interim period.
- Present LAN standard to IRMAC and Field Committee for approval.
- Public guidelines and policy.

A. Assumptions-

- GOSIP standards will be incorporated.

B. Policy Considerations-

- Policies on standardization and procurement of LANs need to be established.

5.5 Maintain/Replace Fire Program Data Communications

Task Manager: Jay Thietten, WO-740

Currently, the Initial Attack Management System's (IAMS) data communications is provided under a VSAT contract with Contel ASC. Approximately 69 VSATs link 34 lightning sensors (DFs) and 60 Remote Interactive Graphic (RIG) terminals to a central computer at BIFC. The Contel contract will expire in November 1990. The options at this time are to replace the VSAT contract for 1 year before replacement with FTS-2000. The IAMS data communications system is presently in AT&T's project management group for evaluation. A preliminary report is scheduled for March 1990.

A. Assumptions-

- The FTS-2000 contract will be modified to support dedicated asynchronous access to the Packet Switch Service (PPS) PAD.

B. Policy Considerations- None Identified

5.6 Convert to FTS-2000: Voice Service, Existing FTS Locations

Task Manager: Ron DeRamus, WO-770

Existing FTS locations are being transitioned to FTS-2000 in 18 phases, 2 weeks apart. Phase 1 began in October 1989, and Phase 18 will be completed in July 1990. AT&T determines in what phase each site will be transitioned.

5.7 Convert to FTS-2000: Voice Service, New Orders

Task Manager: Ron DeRamus, WO-770

Sites presently without FTS will come under the implementation schedule. This schedule will be developed between WO-770 and AT&T in the near future.

5.8 Manage Radio Frequency Authorizations (RFA)

Task Manager: Ron DeRamus, WO-770

The Bureau meets the RFA review requirement by rotating the RFA reviews, by State, on a 5 year basis. This task also involves the processing of new RFAs and coordination of interagency frequency use authorizations.

Task Title: 5.1 Manage Interim Data Communication Facilities and Requirements

Task Manager: J. Strong, SC-340

Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
5.1.1	Interim Network System Design/Review	Wilbert	WO-774 SC SOs BIFC	12/89	06/90		Network Design Alternatives	Strong	
5.1.1a	Identify Known Interim Networking Requirements	Wilbert	WO-774 SC SOs BIFC	12/89	01/90	LIS, SLMS, FFS, MMS Requirement Documentation	Consolidated Requirements for Design	Program Managers	
5.1.1b	Prepare Network Augmentation Study	Wilbert	SC	12/89	01/90	Requirement Analysis	Memorandum or Report	Strong	
5.1.1c	Direct NTIA Study for Network Replacement	Wilbert	SC WO-770	08/89	03/90	FTS-2000 Documentation	NTIA Study	SC Director	
5.1.1d	Identify Funding Requirements	Wilbert	SC	08/89	03/90	5.1.1b, 5.1.1c	Memorandum	Cameron Wilbert	
5.1.1e	Present Interim Network Proposals	Wilbert	SC	01/90	04/90	5.1.1b, 5.1.1c, 5.1.4d	Briefing	Cameron Wilbert	
5.1.2	Budgetary Review and Resource/Requirements Determination	Webber	WO-770 SC	04/90	06/90	5.1.1	Memorandum	Webber	
5.1.2a	Prioritize Interim Data Communications Requirements	Webber	WO SC	04/90	05/90	5.1.1e	Memorandum	Webber DeRamus	
5.1.2b	Reduce or Eliminate Underfunded Requirements	Webber	WO SC	05/90	05/90	5.1.2a	Memorandum	Webber DeRamus	
5.1.2c	Proposal Selection and Approval	Webber	WO SC	05/90	05/90	5.1.2a, 5.1.2b	Memorandum	Webber DeRamus	
5.1.2d	Funds Allocation	Webber	WO	05/90	06/90	5.1.2c	Memorandum	Webber DeRamus	

Task Title: 5.1 Manage Interim Data Communication Facilities and Requirements

Task Manager: J. Strong, SC-340

Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
5.1.3	Interim Network Implementation	Strong	WO-774 SC SOs BIFC	06/90	02/91	5.1.2	Network Acquisition	Strong	
5.1.3a	Prepare RFP	Cameron	SC-343	06/90	09/90	5.1.2	Requisition Documents	Strong	
5.1.3b	Award Contract		SC-340 SC-610	09/90	12/90	5.1.3a	Contract Award	Yarborough	
5.1.3c	Installation of Interim Network	Wilbert	SC-340	12/90	04/90	5.1.3b	Network Installation	Strong/ COTR	
5.1.4	Implement Network Access for Federal Financial System as Funded	Wilbert	WO-774 SC SOs BIFC	12/89	TBD	5.1.3	BLM Access to FFS	SC Director	
5.1.4a	Define FFS Networking Requirements	Wilbert		12/89	01/90		Memorandum	Strong Yarborough	
5.1.4b	Link ASC into Bureau Network	Wilbert	SC	02/91	2/91	5.1.2b	SC Access to ASC	SC Director	
5.1.4c	Provide Data Entry Capabilities from State Offices to ASC	Wilbert	WO-770 SC	03/91	04/91	5.1.4b	State Office Access to ASC	SC Director	
5.1.4d	Provide File Transfer Capabilities form the Service Center to ASC	Wilbert	WO SC	02/91	04/91	5.1.4b	ASC Printouts at SC	SC Director	
5.1.4e	Provide Data Entry Capabilities from the Resource Areas	Wilbert	WO SC	02/91	TBD	5.1.4b	Resource Area Access to ASC	SC Director State Directors	Requires Resources from States

Task Title: 5.1 Manage Interim Data Communication Facilities and Requirements

Task Manager: J. Strong, SC-340

Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
5.1.4f	Provide Print File Capabilities to the Resource Area from ASC	Wilbert	WO SC	02/91	TBD	5.1.4b	ASC Printouts at Resource Areas	SC Director State Directors	Requires Resources from States
5.1.5	Implement Network Access for the Federal Personnel and Payroll System	Wilbert	WO SC	TBD	TBD	5.1.3	SC and State Access to FPPS	SC Director	
5.1.5a	Determine Requirements and Assist in System Design	Wilbert	WO-774 SC SOs BIFC	TBD	TBD		Memorandum	Strong Yarborough	
5.1.5b	Provide Network Access as Required	Wilbert	SC States	TBD	TBD	5.1.3	SC and State Access to FPPS	SC Director	
5.1.6	Implement Network Access for Interim LIS as Funded	Wilbert	SC States	12/89	TBD	5.1.3	SC WO State Access to LIS Prime at SC	SC Director	
5.1.6a	Determine Requirements and Assist in Design	Wilbert Ader	SC States	12/89	TBD		Requirements Memorandum	Cameron Ader	
5.1.6b	Connect Service Center Prime to the Bureau Network	Wilbert	SC-343	02/91	TBD	5.1.6a	State/WO Access to SC	SC Director	
5.1.6c	Provide Services (Service Center Access to Alaska Prime) for Release No. 1	Wilbert	SC Alaska	02/91	TBD	5.1.6b	Alaska Access to SC Prime	SC Director	
5.1.6d	Provide Services (State Office Access to Service Center) for Release No. 2	Wilbert	SC Alaska	02/91	TBD	5.1.6c	State Offices Access to SC Prime	SC Director	

Task Manager: J. Strong, SC-340

Step Order	Action Steps	Resonsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
5.1.6e	Provide Services (Washington Access for Consolidated Reporting) for Release No. 3	Wilbert	SC WO	02/91	TBD	5.1.6d	WO Consolidated Reporting	SC Director	
5.1.6f	Implement LIS Transition to Target	TBD	TBD	TBD	TBD	Target Implementation	LIS Resident on Target	SC Director	
5.1.7	Implement Network Access for BRASS Platform at Minerals Management Service as Funded	Wilbert	SC States BIFC WO-774	12/89	02/91	5.1.3	SC/State Access to BRASS at MMS	SC Director	
5.1.7a	Determine Requirements and Assist in Design	Wilbert	SC States BIFC WO-774	12/89	02/90		Requirements Document	Boden-berger	
5.1.7b	Provide Access to BRASS Platform for Pilot States	Wilbert	SC States BIFC WO-774	12/89	01/90	5.1.7a	Provide Access to BRASS for Pilot States	SC Director	
5.1.7c	Provide Access to BRASS Platform for All States	Wilbert	SC States BIFC WO-774	02/91	02/91	5.1.3, 5.1.7a	Provide Access to BRASS for All States	SC Director	
5.1.8	Implement Network Access for SLMS II at Service Center	Wilbert	SC States BIFC WO-774	12/89	04/90		State Access to SLMS II at Service Center	SC Director	
5.1.8a	Determine Requirements	Wilbert	SC States BIFC WO-774	12/89	01/90		Requirements Document	Strong	

Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
5.1.8b	Provide Dialup Access for SLMS II at Service Center	Wilbert	SC States BIFC WO-774	12/89	04/90	5.1.8a	Access to SLMS	Strong	
5.1.9	Maintain/Replace Honeywell Data Communications	Wilbert	SC States BIFC WO-774	TBD	TBD		Hardware Upgrade	Strong	
5.1.9a	Define Existing Communications Functions of Honeywell Computers	Wilbert	SC States	TBD	TBD		Requirements Document	Strong	
5.1.9b	Develop Plan for Replacement or Maintenance of Honeywell Communications	Wilbert	SC States	TBD	TBD		Planning Document	Strong	
5.1.10	Maintain/Replace Prime Data Communications	Wilbert	SC States	12/89	TBD	5.1.3	Hardware Upgrade	SC Director	
5.1.10a	Define Current and Projected Communications for Prime Computers	Wilbert	SC States	12/89	TBD		Planning Document	Strong	
5.1.10b	Integrate Prime Computers into Interim Network if Funded	Wilbert	SC States	02/91	TBD	5.1.10a	Establish Interconnection Between SC and Primes	Strong	

Task Title: 5.2 Develop Network Management Plan to Meet Distributed Processing Requirements April 1990

Task Manager: J. Strong, SC-340

Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
5.2.1	Develop Centralized Network Management Policy and Procedures	DeRamus	WO-774, SC, SOs, BIFC	03/90	09/90		Network Management Document	Strong	
5.2.1a	Baseline Existing System	Wilbert	WO-774, SC, SOs, BIFC	03/90	04/90	SC and States Input	Configuration Document	SC	
5.2.1b	Review NTIA Report Recommendations	Wilbert	SC	03/90	04/90	5.1.4c (Completion of Report)	Memorandum or Report	Wilbert	
5.2.1c	Develop Network Management Issues	Wilbert	SC, WO-770, States, BIFC, WO-774	04/90	06/90	5.2.1b, 5.2.1a, WO, and State Input	Issue Paper	Wilbert	
5.2.1d	Develop Network Management Prototype	Wilbert	SC, WO-774, States, BIFC	06/90	07/90	5.2.1a, 5.2.1b, 5.2.1c	Memorandum	Wilbert	
5.2.1e	Identify Staffing, Technological, and Funding Requirements	Wilbert	SC	07/90	08/90	5.2.1c, 5.2.1d	Memorandum	Wilbert	
5.2.1f	Identify Operational Organization	Wilbert	WO-770 SC	07/90	08/90	5.2.1c, 5.2.1d	Memorandum	Wilbert	
5.2.1g	Distribute and Finalize Network Management Recommendations	Wilbert	WO-770 SC	08/90	09/90		Report	Strong	
5.2.2	Implement Network Management Plan	Wilbert	WO-770, SC, States, BIFC, WO-774	09/90	TBD	5.2.1.g, 5.2.2d	Centralized Network Management	Strong	
5.2.2a	Staff or Contract Network Management Team (3 FTE) and Oversight Organizations	Wilbert	WO-774, SC, States, BIFC	09/90	12/90		Memorandum	Wilbert	
5.2.2b	Generate and Public Network Standards	Wilbert	WO-770	12/90	TBD	5.2.2a	Standards Document	Wilbert	

Task Title: 5.2 Develop Network Management Plan to Meet Distributed Processing Requirements

Task Manager: J. Strong, SC-340

Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
5.2.2c	Develop Capacity Planning	Wilbert	WO SC	12/90	TBD	5.2.2	Planning Documents	Wilbert	
5.2.2d	Coordinate Configuration Management	Wilbert	WO-774, SC, SOs, BIFC	12/90	TBD	5.2.2	Configuration Documents	Wilbert	

Task Title: 5.3 Transition Existing Network to FTS-2000 Data Services

April 1990

Task Manager: J. Strong, SC-340

Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
5.3.1	Inventory Existing Data Communications Services	Wilbert	SC	02/90	02/90		Communications Baseline	Wilbert	
5.3.2	Identify Equivalent FTS-2000 Services	Wilbert	SC WO	02/90	02/90		Consolidated Requirements	Wilbert	
5.3.3	Develop and Coordinate Implementation Schedule	Wilbert	SC, WO-774, BIFC, States	03/90	04/90	5.3.2	Memorandum or Report	Wilbert	
5.3.4	Order FTS-2000 Data Services	DeRamus	WO	05/90	09/90	5.3.3	Service Order	DeRamus	
5.3.5	Cutover to FTS-2000 Data Services	Wilbert	SC, WO-774, States, BIFC	09/90	10/90	5.3.4	FTS-2000 Data Services	Wilbert	

Task Title: 5.4 Develop Policy and Standards for LANs

April 1990

Task Manager: E. Harne, LAN Subcommittee, UT-954

Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
5.4.1	Baseline Installed LANs	LAN Subcommittee	WO-774, SC, States, BIFC	12/89	05/90		LAN Baseline Configuration	Harne	
5.4.2	Identify and Consolidate LAN Issues	LAN Subcommittee	WO-774, SC, States, BIFC	12/89	05/90	5.4.1	Memorandum	Harne	
5.4.3	Develop Technical LAN Recommendations for Interim Period	LAN Subcommittee	WO-774, SC, States, BIFC	06/90	09/90	5.4.2	Memorandum or Report	Harne	
5.4.4	Present a LAN Standard to IRMAC and Field Committee	UT-954, Harne	WO-774, SC, States, BIFC	10/90	10/90	5.4.3	Briefing and Approvals	Harne	
5.4.5	Public Guidelines and Policy	DeRamus	WO-770	10/90	12/90	5.4.4	Policy Paper	DeRamus	

Task Title: 5.5 Maintain/Replace Fire Program Data Communications

April 1990

Task Manager: Jay Thietten, WO-740

Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
5.5.1	Request 1 Year Exemption from FTS-2000 Requirement	R. DeRamus		02/90	04/90		GSA Exemption		Extend Contel Contract
5.5.2	Evaluate AT&T Service Proposal	J. Thietten	WO-772	03/90	05/90		Recommendation		
5.5.3	Implement FTS-2000 Services	R. DeRamus	WO-740	10/91	02/92	Fire Season	FTS-2000 Service	Service Tested and Accepted	Must be Cost Effective

Task Title: 5.6 Convert to FTS-2000: Voice Service, Existing FTS Locations

Task Manager: Ron DeRamus, WO-770

Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
5.6.1	Available for Master Plan Version 4								

Task Manager: Ron DeRamus, WO-770

Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
5.7.1	Available for Master Plan Version 4								

Task Title: 5.8 Manage Radio Frequency Authorizations

Task Manager: Ron DeRamus, WO-770

Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
5.8.1	Available for Master Plan Version 4								

6 Operations and Maintenance

This section provides the strategic guidance for establishing the operations and maintenance (O&M) requirements to sustain all ADP hardware and telecommunications systems in the operational phase of the life cycle. The purpose of O&M planning is to provide for successful ongoing operations and maintenance through the transition of the accepted delivery of the target system from the contractor.

A. Assumptions-

- A history of operations and maintenance is not being maintained at all sites on a consistent basis.
- Site specific logistical support requirements are not now carefully documented consistently at all sites.
- Operational training requirements are being defined prior to transfer and turnover.
- Funding will be available for all tasks.

B. Policy Considerations- None Identified

6.1 Develop Strategy for Meeting Interim Requirements (Includes Operations, Concepts, Sizing Primes, etc.)

Task Manager: Jack Webber, WO-770

This activity involves describing the operations, concepts, and scenarios that apply to the Interim LIS. Basically, the scenarios will focus on decentralized processing, centralized processing, or a hybrid version of the two. This task will include analyzing the Prime computer system and data communications network for proper sizing based on benchmarks conducted in the SC using Oracle and the Prime model 6550. Methodologies for determining systems sizing will be determined based on workload projections in the RFP J tables. Guidance will be developed on determining the costs for each scenario.

A. Assumptions-

- The Prime contract will be extended through 1993 but actions to gain the extension will not be taken until after release of the RFP.
- FTS-2000 will be the data carrier.
- Upper management will be involved in selecting the scenarios for its respective field organizations.
- Complete cost analyses will be conducted for each scenario and coordinated with the budget process.
- X-windows user interface will not be provided for the interim.

B. Policy Considerations- None Identified

6.2 Five Year ADP and Data Communications Procurement Plan

Task Manager: Jack Webber, WO-770

In accordance with 376 DM4 and 376 DM4, all Bureau offices must annually outline their planned acquisitions for the next fiscal year (budget year) and the 4 outyears.

This plan is intended to be an appendix to the Information Resources Management Plans (IRMP) or Strategic Plans. The IRMPs are designed to outline the functional requirements for information management along with goals and objectives for satisfying the requirements. The FYPP is designed to provide the tactical approach for meeting the objectives in the IRMP. The FYPP reflects the requirements and dollar amounts for the entire 5-year period.

After technical review, packaging, and development of recommended procurement strategies by the SC, this information is presented to the WO-770 for their approval. The consolidated information then serves as input to the Bureau's Five Year ADP and Data Communications Procurement Plan (FYPP). Applicable portions of the approved FYPP are then submitted to the Department.

A. Assumptions-

- Planning at the SO, DO, and RAO has been completed (even with funding uncertainties).
- Planning is for more than just the next fiscal year - it includes the next 5 years.

B. Policy Considerations-

- Departmental Manual 376 DM4.
- BLM Instruction Memorandum 89-50, Changes 1 and 2.

6.3 Develop Strategy for Extending the Prime Contract

Task Manager: Jack Webber, WO-770

This activity describes the actions necessary to extend the Prime contract to provide needed processing capability for Interim Releases and growing GIS workloads. The Prime contract expires June 5, 1991. It is anticipated that the Target System will not provide like capability until 1995-1996. Currently, the Primes are used exclusively for GIS processing but will eventually host various releases of Interim and will replace CR/MC functionality now being provided by the Honeywell systems while still providing the platform for GIS processing.

A. Assumptions-

- The Prime contract will be extended through FY 1992.
- Work will begin immediately to prepare a competitive maintenance contract for a 5-year period beginning FY 1993.

B. Policy Considerations- None Identified

6.4 Technical Support

Task Manager: Bernie Cameron, SC-343

The Service Center currently provides technical support for the Bureau's Honeywell mainframe and minicomputers. The need for this same type of support of the Prime systems located throughout the Bureau also exists. Service Center employees providing Honeywell support are being cross-trained on the Primes. However, as long as the Honeywells are in place, these employees must also maintain technical competence on the current platform. The requirements for technical support of the Primes is expected to increase significantly with the installation of Interim LIS. It is imperative that the Service Center develop a high level of Prime technical expertise as soon as possible. The Honeywell systems are supported by an on-site Honeywell analyst at the Service Center. Similarly, it is recommended that an on-site Systems Programmer from Prime be permanently located in the Systems Software Section at the Service Center. This would provide the on-site expertise that is currently needed as well as providing a one-on-one training situation for current systems programmers.

The State Offices will provide basic technical support to sites using their jurisdiction. Technical problems beyond the capabilities of the field offices will be referred to the Software Section for solution.

A. Assumptions-

- Funds for Prime contractor support will be available.

B. Policy Considerations- None Identified

Task Title: 6.1 Develop Strategy for Meeting Interim Requirements

Task Manager: Jack Webber, WO-770

Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
6.0	Operations and Management					Target - Design/ Development Target - Facilities Management Target - Integrated Logistics Support Target - System Integration Target - System Transition Target - Certification and Acceptance			
6.1.1	Develop Scenarios Decentralized Develop Scenarios Centralized Develop Scenarios Combination of Decentralized/Centralized	Webber	WO-770 SC-340 SC-320	TBD	TBD				

Task Title: 6.2 FYPP

April 1990

Task Manager: Jack Webber, WO-770

Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
6.2.1	FYPPs into SC-343D	IRM Chiefs	IRM Division Chiefs		6/90		SO FYPPs	SD Signs	
6.2.2	SC Review of FYPPs	Cameron	Davis	2/90	6/90		FYPP - B-W	SCD Signs	
	WO-770 Review of FYPPs	Webber	Anderson	4/90	4/90		BLM FYPP	AD WO-700	
	Presentation to BMT	Webber	Anderson		6/90		BLM FYPP	AD WO-700	
	Bureau FYPP to DOI	Webber	Anderson		7/90		BLM FYPP	Director	
6.2.3	SC Review of FYPPs	Cameron	Davis	2/91	4/91		FYPP - B-W	SCD Signs	
	WO-770 Review of FYPPs	Webber	Anderson	4/91	6/91		BLM FYPP	AD WO-700	
	Presentation to BMT	Webber	Anderson		6/91		BLM FYPP	AD WO-700	
	Bureau FYPP to DOI	Webber	Anderson		7/91		BLM FYPP	Director	
6.2.4	SC Review of FYPPs	Cameron	Davis	2/92	4/92		FYPP -B-W	SCD Signs	
	WO-770 Review of FYPPs	Webber	Anderson	4/92	6/92		BLM FYPP	AD WO-700	
	Presentation to BMT	Webber	Anderson		6/92		BLM FYPP	AD WO-700	
	Bureau FYPP to DOI	Webber	Anderson		7/92		BLM FYPP	Director	
6.2.5	SC Review of FYPPs	Cameron	Davis	2/93	4/93		FYPP - B-W	SCD Signs	
	WO-770 Review of FYPPs	Webber	Anderson	4/93	6/93		BLM FYPP	AD WO-700	
	Presentation to BMT	Webber	Anderson		6/93		BLM FYPP	AD WO-700	
	Bureau FYPP to DOI	Webber	Anderson		7/93		BLM FYPP	Director	
6.2.6	SC Review of FYPPs	Cameron	Davis	2/94	4/94		FYPP - B-W	SCD Signs	
	WO-770 Review of FYPPs	Webber	Anderson	4/94	6/94		BLM FYPP	AD WO-700	

Task Title: 6.2 FYPP

Task Manager: Jack Webber, WO-770

Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
	Presentation to BMT	Webber	Anderson		6/94		BLM FYPP	AD WO-700	
	Bureau FYPP to DOI	Webber	Anderson		7/94		BLM FYPP	Director	
6.2.7	SC Review of FYPPs	Cameron	Davis		2/95		FYPP - B-W	SCD Signs	
	WO-770 Review of FYPPs	Webber	Anderson		4/95		BLM FYPP	AD WO-700	
	Presentation to BMT	Webber	Anderson		6/95		BLM FYPP	AD WO-700	
	Bureau FYPP to DOI	Webber	Anderson		7/95		BLM FYPP	Director	

Task Title: 6.3 Develop Strategy for Extending Prime Contract

Task Manager: Jack Webber, WO-770

Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
6.3.1	Decide Length of Prime Contract Extension	WO-700	WO-770 SC-340 SC-650	3/90	3/90	Scope of Target		AD-700 Sign Off	
6.3.2	Issue CBD	FWS SC-650	WO-770 SC-340	4/90	6/90		Responses from Vendors		
6.3.3	Develop DM 376 Extension Request for Department and GSA	FWS SC-650	WO-700 SC-340	4/90	6/90	Responses from above Vendors	376 DM 4	AD-700 Sign Off	
6.3.4	Department and GSA Approval	OIRM,FWS SC-650 WO-770		6/90	8/90		Extended DPA	Department and GSA Sign Off	
6.3.5	Negotiations with Prime, Inc.	FWS SC-650		9/90	9/90	Department and GSA Approval	Negotiated Contract		

Task Title: 6.4 Technical Support

Task Manager: Bernie Cameron, SC-343

Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
6.4.1	Establish Prime Bureauwide Technical Support Function	Cameron	SC-340 Prime Contractor	TBD		Availability of Funds	Bureau Policy for Prime Support	Prime Contractor in Place Issuance of Bureau Policy Training of BLM Systems Programmers	

7 Software Development

All ADP software systems within Life Cycle Management Initiation, Development, and O&M methodology.

7.1 Transfer Case Processing Capabilities to Prime Computer for Release No. 1

Task Manager: Bob Ader, SC-344

The purpose of this activity is to prepare the BLM for the Target System. This activity will consolidate existing LIS capabilities and data bases in preparation for the Target System. These capabilities will be used as a mechanism to edit, update, and standardize data bases and to develop the skills necessary to use the Target System. Organization, management, and operational procedure issues will be addressed to initiate the development of the infrastructure needed for Target System Automation. See related Task in People and Organization No. 3.5 "Public Room Information and Education Outreach for Interim."

Release No. 1 will replicate the existing automated functions of Case Recordation, ORCA, Mining Claim Recordation, and AALRS. Portions of LLD and Status will be included due to their existing functionality in AALRS.

Release No. 1 is guided by three objectives:

- o Move case processing (AALRS) off the B-4800 in Alaska.
- o Begin to standardize the Bureau's data (Release No. 1 will begin the process in Alaska only).
- o Initiate the development of skills and organizational structure.

The system will be implemented for operational purposes in Alaska only. Installations will occur in New Mexico and Nevada for beta testing. Installation in Alaska will occur in the fall (September) of 1990 followed by installation in New Mexico and Nevada for beta testing.

A. Assumptions-

- o Scope of releases will not change significantly.
- o Data will be converted in time to implement releases.
- o Funding will be available for SC as well as field office operation.
- o Prime contract will be extended.
- o Scope of Release No. 1 will only replicate systems 1-4 (AALRS) on the B-4800, as well as the capabilities in CR, MCR, ORCA - Reviews are timely.
- o The life cycle of this system is dependent on the Target System schedule.
- o Data Conversion will be on time.
- o Public training sessions will be scheduled.
- o Public will acquire hardware to access system remotely standard.

B. Policy Considerations-

- Absence of Bureauwide Configuration Management Procedures.
- Absence of Bureauwide Data Management Procedures.
- Draft Information Access Policy.
- Absence of Data Standards.
- Absence of Bureauwide Operational Procedures.

7.2 Modify Records Processing Capabilities on Prime for Bureauwide Implementation (Release No. 2)

Task Manager: Bob Ader, SC-344

Release No. 2 will focus on adding LLD and status data to the system for retrieval and maintenance. Data conversion for the lower 48 will have to be conducted as part of this effort.

Release No. 2 will focus on the following objectives:

- Standardize and cleanup records data on a Bureauwide basis.
- Move Bureau forward a single records processing system.
- Facilitate the development of a Bureauwide infrastructure for management and organization (Operations Concept).

This release will be installed on a Bureauwide basis beginning in March 9991. It will replace current systems of CR, MCR, LLD, and Status.

A. Assumptions-

- Data will be on time.
- Data Dictionary will be in place and will be used.
- Data standards will remain stable.
- Telecommunications will be made available (wide area network).

B. Policy Considerations- None Identified

7.3 Automated System for Acquisition Processing (ASAP)

Task Manager: Joe Federline, WO-852

This system automates all the procurement functions from creation of the requisition to closeout of the order or contract. This system is currently a manual system, analysis (LCM) has been completed, and the program leader is in the process of deciding between in-house design and acquiring an existing system. Functional requirements indicate this will be a distributed system. Prior to implementation of the full system functionalities, an interim microcomputer based acquisition system acquired from another agency will be implemented to provide the Bureauwide reporting capabilities required by the Department of the Interior.

A. **Assumptions-**

- The interim microcomputer based system will be implemented in FY 90.
- Both the interim and the full ASAP system will streamline the acquisition process and reduce the paper intensive workload.
- Eventually, the ASAP system will interface with FFS and the property management systems.
- The interim (FY 90) acquisition system will not interface with FFS or the property system.
- All acquisition reporting will be performed electronically by the ASAP system.
- Funding and workmonths will be available for full implementation of ASAP.
- The proposed system will be included in the target environment eventually. It will not be replaced by the administrative component of the target system.
- The proposed system will interface with the IRM Technology Inventory.

B. **Policy Considerations-** None Identified

7.4 Implement Federal Financial System (FFS)

Task Manager: Dave Holland, WO-820

This is a Departmentwide system operating on the Bureau of Reclamation's (BOR) hardware at the Administrative Service Center in Denver. BLM is developing interface and reporting programs for use with this system. In the short term (1 to 1-1/2 years starting October 1, 1990) there will be communication between the DPS-8000 and the BOR computer. Source documents will be mailed to the SC for key entry in the short-term period. Beginning in April 1990, pilot test will start in the SC. The only possible delay will be the release of the FFS software.

The source documents will go to the SC during pilot using the SC-610 LAN for key entry into the FFS model which represents a six district state. After the first 18 months, the BLM will begin piloting various source documents including commitment accounting (requisitions) for 25K and above. The first possible on-line district input will be October 1, 1991.

A. **Assumptions-**

- In the long-term, all files will be batched DPS-6+ computers (or possibly some other alternative) with the District Offices performing their own data entry.
- The output will probably reside on the DPS-8000 Program Management Reporting System (PRMS).

- The BLM will review the National Park Service PC based system for the long-term needs.
- There is a possibility for a budget supplement, but BLM needs to make the system work in a central model first.
- District Offices will not log directly into the BOR Administrative Service Center computer. The cost would be too high.
- Commitment accounting in a centralized mode is difficult to manage.
- The target system will have IBM 3270 protocol capability.

B. Policy Considerations-

- Elimination of the document fact sheets.
- What happens to existing OPBUDGET system on DPS-6+ systems?

Task Title: 7.1 Transfer Case Processing to Prime Computer for Release No. 1 April 1990

Task Manager: Bob Ader, SC-344

Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
7.1.1	Critical Design Review (Space - Designs) Subsystem 5-9	Aikens Thomas	Review Board 4 Persons	01/89	01/89	Cast Type Matrix	Signed Review	LIS Review Bid Approved	
7.1.2	Develop Code for Records Configuration Item (includes unit testing)	Carlander	6 Sys Analysts 1 Lead Analyst	08/89	08/90	Design Document Testing Tasks Action Code Conversion Matrix	Coded System	Completion of Training	
7.1.3	Develop Code for Subsystem 5-9	Aikens	6 Sys Analysts 2 Programmers	12/89	08/90	Data Base Design 46 Test Procedures SC and AK	Applications Code		Include Unit Testing
7.1.4	Perform Independent Systems Testing	Katz	4 Users (SC)	08/90	10/90	Coding Documentation	Quality System	Approved Release No. 1 by Testers	
7.1.5	Perform Independent Systems Through Acceptance User Test in Alaska	Dietz	10 Users	10/90	12/90	Application Code	Qualifications Review Document	Acceptance of System	Districts, Lands, Resources, Minerals, etc.
7.1.6	Develop Users Documentation	Zulick	2 Doc Spec (TGS) 2 Uses (SC/AK) 2 Sys Analysts (PT)	11/89	10/90	Coding and System Analyst Input	User Manual Systems Manual	Users Review	
7.1.7	Develop Users Documentation Subsystem 5-9	Frazier	2 Doc/Trng Specialists 2 Users 2 Sys Analysts (SC-320)	01/90	10/90	Coding and System Analyst Input	User Manual Systems Manual	Users Review	See if included in 6 from Shari
7.1.8	Records Transition Planning Develop Standards, Products, Screens, and Printouts	Spencer	SC-340	06/90	10/90	Data 8.1	Listing of Types	Received by SC-324	

Task Manager: Bob Ader, SC-344

Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
7.1.9	Develop Training Materials	Zulick	2 Doc/Trng Spec (TGS)	12/89	10/90	Completion of Code	Training Manuals and Materials		
7.1.10	See P&O Task 3.5 Public Room Transition	Spencer	1 Public Affairs 1 DOC Specialist 2 Trainers 1 User Support	01/90	09/90		Training Manuals and Tutorial		Work with Zulick
7.1.11	Develop Training Test Materials Subsystem 5-9	Frazier	2 Doc/Trng Specialists 2 Users 2 Sys Analysts	12/89	10/90	Completion of Code	Training Manuals and Materials		
7.1.12	Prepare Implementation Specifications	Zulick	2 Sys Analysts (SC) 2 Sys Analysts (AK)	10/89	07/90	Draft Implementation Plan in Activity 2	Implementation Specification	AK Approval	
7.1.13	Convert AK Data to LIS Format	Aikens	6 Sys Analysts	10/89	10/90	Data Base Design	Standardized Data Files		
7.1.14	Install System and Load Data (Application Software)	Cameron Carlander	2 Sys Analysts (SC) 2 Sys Analysts (AK)	10/90	10/90	Coding/Testing Documentation	Installed System Ready for Testing	Initial Test of User Acceptance	
7.1.15	Train AK Acceptance Testers	Zulick	2 User/Train (SC) 2 User/Train (AK) 10 User/Trainees	10/90	10/90	Installation and Readiness Testing	Trained AK Staff	Management Approval in AK	This is a dry run for user training
7.1.16	Perform AK User Acceptance Test Subsystem 1-10	Dietz	10 Users	12/90	02/90	Installation and Training	New Accepted System	User and Management Approval	

Task Title: 7.1 Transfer Case Processing to Prime Computer for Release No. 1

Task Manager: Bob Ader, SC-344

Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
7.1.17	Training and Acceptance for AK O&M	Frazier	2 Sys Analysts (SC) 2 Sys Analysts (AK) 2 User/Train (AK)	12/90	12/90	User Acceptance Test	Operational System	AK Management Approval	
7.1.17a	Train AK Trainers	Zulick Foster	2 Trainers (SC) 2 Trainers (AK) 8 AK Trainer/ Trainees 2 NV Trainer/ Trainees 2 NM Trainer/ Trainees	10/90	12/90	System Install	Courses	Trainers Ready to Train	
7.1.17b	Train Users	Zulick Frazier	2 Trainers (SC) 10 Trainers (AK)	08/90	On-going	System accepted communications working	10-20 Courses 30-60 Modules		
7.1.17c	Train Public and Other Agencies (Also see P&O Task No. 3.5)	Frazier	5 Trainers (AK) 1 Trainer (SC)	12/90	On-going	System accepted communications working. Hardware available	5 Courses minimum		
7.1.18	Unplug B4800	AKSO	1 State Director 1 IRM Deputy and Staff	02/90	02/90	Acceptance Test	Defunct B4800	AK/SC Celebration	All Invited
7.1.19	Install System in NM and NV for Testing	Cameron	2 Sys Analysts (SC) 2 Sys. Analysts (NV/NM)	12/90	12/90	System Testing	Beta Test Installation	Installed System	

Task Title: 7.1 Transfer Case Processing to Prime Computer for Release No. 1

Task Manager: Bob Ader, SC-344

Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
7.1.20	Load NM and NV Data	Carlander	2 Sys Analysts (SC) 2 Sys Analysts (NV/NM)	12/90	12/90	Installation	Beta Test Data Base		
7.1.21	Training NV/NM Beta Testers	NVSO NMSO Zulick	2 User Train (SC) 2 User Train (NV/NM)	01/90	01/90	Installation	Trained Staff		
7.1.22	Beta Testing	NVSO NMSO	10 Users 10 Users	01/90	02/90	Training	Requirements for Release No. 2		
7.1.23	LLD Data Entry AK	AK-944	13 Data Entry Specialists 5 Temps 1 Supervisor	06/88	08/90		2.85 Million Lines of LLD Entered onto Prime	Verification	
7.1.24	Data Cleanup Project AALMRS Data	AK-944	7 Status Analysts 1 Supervisor/ Manager	04/89	12/90		10 Projects Status Cleanup Corrections - AALMRS Data		
7.1.25	Prepare Data Conversion Matrices - AALMRS Data to Prime	AK-944 AK-941	5 Status Analysts 1 Manager Involves Tasks	10/89	04/90	Conversion Metric Format	65 Matrices to AK-941 for Conversion to Flat Files		
7.1.26	Digitize Hydrography AK Twps	AK-944 AK-920	3 Carto Techs 1 Coordinator	10/88	08/90		700 Twps with Digitized Hydrography		

Task Title: 7.1 Transfer Case Processing to Prime Computer for Release No. 1 April 1990

Task Manager: Bob Ader, SC-344

Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
7.1.27	Identify Unsurveyed	AK-944 AK-920	3 Surveyors 1 Coordinator	10/88	08/90		5900 Townships with Id'd Inholdings		
7.1.28	GCDB Contract Administration and Monitor	AK-944 AK-920	2 Surveyors 1 Coordinator Contract Personnel	10/89	09/91		3000 Townships GCDB Data Entered		

Task Title: 7.2 Modify Records Processing System on Prime Computer for Bureauwide Implementation
Release No. 2
Task Manager: Bob Ader, SC-344

Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
7.2.1	Decision to Continue	Field Committee		2/90	2/90		Memo of Approval	Field Committee Approval	
7.2.2	Modify Records CSCI Design	Carlander	2 Sys Analysts	05/90	11/90	Schedule for Release No. 1 Modified Data Model	Updated Records CSCI Design	Design Review	
7.2.3	Critical Design Review No. 2	Carlander	1 Moderator 2 Sys Analysts (SC) N Field Personnel	11/89	11/89	Design Documents	Approval of Design Documents	Critical Design Review	
7.2.4	Develop Data and Data Base Conversion Code	Carlander	1 Rec Sys Analyst 1 Spa Sys Analyst	06/89	01/91	Modified Design Including Data Base Design	Data Conversion Code	Data Inspection	
7.2.5	Develop Software for Release No. 2	Carlander	10 Sys Analysts	12/90	03/91	Design Review	Unit Tested Code	Independent Testing	
7.2.6	Perform System Testing	SC-344 Katz SC-342	2 Quality Assurance 2 Sys Analysts	03/91	04/91	Coding	Tested System	Test Acceptance Document	
7.2.7	Develop Telecommunications Spec. (Procurement Issues)	SC-343 Cameron		04/90	06/90	Ops. Concept	RFP for Telecomm	IRM Review	
7.2.8	Develop Telecommunications	Cameron SC-344 IRM	2 Sys Analysts 2 Telecomm 2 IRM	11/89	01/91		Telecomm Reg.	IRM Review	
7.2.9	Perform Independent Testing for Release No. 2	SC-344 Katz	2 QA/QC Spec. N Field Personnel	04/91	06/91	Coding	Test Results	Approval for Release	

Task Title: 7.2 Modify Records Processing System on Prime Computer for Bureauwide Implementation
Release No. 2
Task Manager: Bob Ader, SC-344

Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
7.2.10	Records Transition Planning Develop Standards, Products, Screens, and Printouts	Spencer	NM Task Force	06/90	03/90	Data 8.1	Report	Approved by WO-771	
7.2.11	Update and Add to Users Documentation	SC-344 Zulick	2 Doc. Spec 2 Uses SC-320	12/90	06/91	Coding Users Input	Update User and System Manuals	User Review	
7.2.12	Update and Add to Training Material (See P&O Task No. 3.5)	SC-344 Zulick	2 Trainers 2 Users SC-320	12/90	06/91	Coding Users Input	Updated Training Materials	User Review	
7.2.13	Prepare Bureauwide Implementation Plan	Kirby	IRMAC WO SC-320	12/90	06/91		Implementation Task Plan	IRM Field Committee Review	
7.2.14	Install Telecommunications	SC-343 Cameron	2 Telecomm. (SC) IRM	02/91	06/91	Procurement	Wide Area Network	Acceptance Test	
7.2.15	Install System and Load Data Bases	SC-343 Cameron	2 Sys Analysts (SC) 2 Sys Analysts (SO)	06/91	06/91	Data Conversion	System Ready for Testing	Test Readiness Review	
7.2.16	Train Acceptance Testers	Zulick SOs SO	2 Trng Spec (SC) 10 Trng Spec (SO) All State acceptance testers including trainers	06/91	06/91	Installation	Trained SO Testers and Trainers	Completion of Training Schedule	This will be a dry run of user training
7.2.17	Perform User Acceptance Tests	SOs	N Users	06/91	12/91	Users	Operational System	User Acceptance	

Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
7.2.18	Train SO Users	Zulick	6 Trng Spec (SC) 24 SO Trainer/ Trainees minimum	06/91	12/91	System Acceptance	12 Courses (one each in SO) Minimum 36 modules	Trainers Ready	
7.2.19	Train SO Users	Zulick SOs	6 Trng Spec (SC) 24 SO Trainers minimum All States users	06/91	12/91	All States Ready	12–60 Courses 36-150 Modules	Users Trained	

Task Title: 7.3 Automated System for Acquisition Processing (ASAP)

April 1990

Task Manager: Joe Federline, WO-852

Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
7.3.1	Analysis	WO-850	Sys Analyst Sys User	04/88	05/89	N/A	Functional Requirements Document	User Acceptance	
7.3.2	Design	WO-850	Sys Analyst Sys Lead	08/89	03/91	Completion of Required Document	Design Proposal	User Acceptance	
7.3.3	Construction	WO-850	Sys Analyst Sys Lead Programmers	03/91	04/92	Completion of Design Proposal	Program Code, OCL, Test Data, Test Results	User Acceptance	
7.3.4	Validation/Acceptance	WO-850	Sys Analyst Sys Lead Sys Users	04/92	04/93	Completion of Construction	System Test Data and Results, User Guide, and Training	User Acceptance	
7.3.5	Implementation	WO-850	Sys Analyst Sys Lead Sys User	04/93	04/95	Completion of Validation Acceptance	Application Software Document	User Acceptance Release System to Production	

Task Title: 7.4 Implement Federal Finance System (FFS)

Task Manager: Dave Holland, WO-820

Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
TBD									

8 Software Maintenance

This task will describe the way the Bureau will manage software development and software maintenance until deployment of the target system and in conjunction with the Software Improvement Program.

8.1 Establish Process to Evaluate the ADP Change Proposals

Task Manager: Dennis Anderson, WO-773

The management process will be employed for evaluating requests for ADP applications software maintenance at the Service Center to ensure that only priority maintenance is performed. All maintenance will be identified as one of the following types: adaptive, corrective, or perfective. The three levels of maintenance will be defined with policies and procedures for addressing priorities and approvals for each.

This activity also consists of maintenance of existing applications systems on all levels of hardware. Maintenance consists of making changes to the software based on user requests. Some of the systems are being replaced by Interim and FFS while others are being evaluated through the Software Improvement Program. A list of systems being maintained by the Branch of Computer Applications is included in **Tables 8.7-1 and 10.5-1**.

A. **Assumptions-**

- Adaptive maintenance will be defined as modifications required in response to organizational, regulatory, or computer operating system changes.
- Corrective maintenance will be defined as modifications to correct procedural or computational errors that must be fixed prior to any further system "run" activity.
- Perfective maintenance will be defined as user-desired enhancements such as providing new inputs/outputs, tables, or changes in sorting and totaling procedures.
- All ongoing developments will be continued with full funding.
- Schedules for Administrative Service Center implementations will not slip due to maintenance.
- Field offices will have the resources to effectively implement new applications.
- Configuration management procedures will be in place.

B. **Policy Considerations-**

- Rewrite the Bureau Manual section for automated data processing.
- Finalize and issue procedures and approvals for applying maintenance.
- Refine the process for inclusion in the AWP process.
- Field Office to adopt software maintenance policies and approval process.

8.2 Match/Merge (M/M) Project (LLD/Status)

Task Manager: Margo Fitts, AZ-954

This activity consists of data cleanup and is to provide certified (edited) data for legal land description (LLD) and status in a standardized format. This process moves the LLD files and status work block files from the Honeywell DPS-8000 to the DPS-6+ for each state. The DPS-8000 files should be archived as soon as the state files are verified. The DPS-6+ files will be moved to the interim system.

A. **Assumptions-**

- o M/M will be completed in time to allow DPS-6+ to be replaced.
- o All DPS-6+s will have sufficient capacity to run the application.
- o We will gain approval to augment the systems if needed.
- o Data communications upgrades will be implemented to support the effort.

B. **Policy Considerations-** None Identified

8.3 Match/Merge (M/M) Project (CR/MC)

Task Manager: Tom Adler, SC-322

This activity consists of data cleanup and is to provide certified (edited) data for case Recordation (CR) and Mining Claims Recordation (MCR) in a standardized format. CR and MCR files are in DMIV data bases residing on the Honeywell DPS-8000. These files will remain on the DPS-8000. Data cleanup and certification (editing) will be accomplished by copying the files to a non-data base file and processing in range order on the SC Prime. The format of the copied file is identical to the status file. However, the data base file format is not changed. Errors and non-matches identified in the edit process will be corrected on the DPS-8000 DMIV data base (See Data 9.2).

A. **Assumptions-**

- o The Service Center Prime will be utilized for processing.
- o M/M will be completed in time to allow DPS-6+ to be replaced.
- o We will gain approval to augment the systems if needed.
- o Data Communications upgrades will be implemented to support the effort.
- o No releases of the CR/MCR Match/Merge software will be issued to the States.

B. **Policy Considerations-** None Identified

8.4 Continue Current Software Maintenance

Task Manager: Joe Strong, SC-340

This activity consists of maintenance of existing applications systems on all levels of hardware. Maintenance consists of making changes to the software based on user requests. Some of the systems are being replaced by Interim and FFS while others are being evaluated through the Software Improvement Program. A list of systems being maintained by the Branch of Computer Applications is included in **Tables 8.7-1 and 10.5-1**.

A. **Assumptions-** None identified

B. **Policy Considerations-**

- Field Office to adopt software maintenance policies and approval process.

Table 8.4-1. Administrative Application Systems Currently Under Maintenance in Addition to Those Identified for Conversion to the Target System.

PC BASED SYSTEMS

SYSTEM CODE	TITLE
PM	Forest Models
AI	Automated Inspection Records System
	Digital Elevation Model
	Grazing Authorization and Billing System
	Rangeland Improvement Project Systems
	Investment Analysis Model
	Individual Contract Records System
	Monthly Report of Operations (KEY-ENTRY)
	Monthly Report of Operations (DIGITIZED)
SW	Soil, Water, and Air Resources Systems

PROPOSED PC BASED SYSTEMS

SYSTEM CODE	TITLE
SB	Seed Bid Analysis

SYSTEMS TO BE REPLACED BY INTERIM

SYSTEM CODE	TITLE
BS	Bond Surety
LT	Mining Claims
MN	Master Name
OG	Case Recordation System

SYSTEMS DESIGNATED TO BE ARCHIVED

SYSTEM CODE	TITLE
BB	Wildlife Bulletin Board System
BM	Budget Matrix
CP	Eastern States Office patent Index
EI	Corridor EIS Program
EO	Equal Employment Opportunity
ES	Ecological Site Inventory - ARCHIVED except for data
FB	Labor Cost
FS	Suspense, Clearing, Unearned Account
HR	Health Risk Appraisal Program
MB	Automated Management by Objective
MP	Personnel System
PU	Forest Utilities
SH	Seasonal Hire (Label Generation on Annual Basis)

8.5 AIRS

Place Holder - Will be included in Version 4.

8.6 MRO

Place Holder - Will be included in Version 4.

8.7 GABS

Place Holder - Will be included in Version 4.

Task Title: 8.1 Establish Process to Evaluate ADP Change Proposals

Task Manager: Dennis Anderson, WO-773

Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
8.1.1	Issue Software Maintenance Memorandum	D. Anderson			04/30				
8.1.2	Develop/Implement Procedures for Bureauwide Systems	J. Strong			07/31				
8.1.3	Develop/Implement Procedures for State Office systems	State Office Branch Chief			07/31				

Task Title: 8.2 Continue Match/Merge (M/M) Project

April 1990

Task Manager: Margo Fitts, AZ-954

Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
8.2.1	Construction	Margo Fitts	Tom Adler		03/90		Program Code, OCL, Test Data, Test Results	User Acceptance	
8.2.2	Implementation	Tom Adler	Frank Wiley	01/90	09/90	Completion of Construction	Application Software Document	User Acceptance Release Systems to Production	Some States May Require Up to 2 Years to Complete Implementation
8.2.3	Operations/Maintenance	SC-340	Joe Strong	09/90	Indef	Completion of Implementation	Implemented System and Document	Memo of Service Center Acceptance	Archived When Data Goes to Target

Task Title: 8.3 Match/Merge (M/M) Project (CR/MC)

Task Manager: Tom Adler

Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
8.3.1	Construction	Tom Adler	John Duke	01/90	04/90				
8.3.2	Implementation	Tom Adler	John Duke SC-322 Staff	03/90	10/90				
8.3.3	Operations/Maintenance	SC-340	Joe Strong	10/90	Indef				

Task Title: 8.4 Continue Current Software Maintenance

Task Manager: Joe Strong, SC-340

Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
8.4.1	Maintenance of Finance	Graham	SC-342A Staff	On-going	On-going				
8.4.2	Maintenance of Systems Administrative Systems	Gutwein	SC-342B Staff	On-going	On-going				
8.4.3	Maintenance of Resource Systems	Lowe	SC-342C Staff	On-going	On-going				
8.4.4	Maintenance of L&M System	Carlander	SC-342B Staff	On-going	On-going				

9 Cost Accounting/Cost Recovery

This task will define the policy, responsibility, and management for the Cost Accounting/Cost Recovery activity in the Bureau. It will clarify the schedule and deliverables expected.

A. Assumptions-

- Software tools will be available to conduct consistent cost accounting across all field offices.
- The cost accounting will be used to determine equitable rate structures for services provided.
- Cost accounting will be accepted and adopted throughout the Bureau prior to deployment of the target system.
- Standard rates will be applied across all offices.
- Funding and workmonths will be available to exercise all action steps.
- The new Financial Management System will not provide the capability for Cost Accounting as defined in FIPS Pub 96.
- OMB A-130 will be modified to address new cost recovery issues being surfaced by other agencies.
- There will be management involvement in formulating a cost accounting/cost recovery program in the Bureau.
- Cost recovery collections (copy fee) will be used to supplement the operations and management subactivity (4530) thus providing relief to other programs.
- In the foreseeable future, cost recovery will be applied to external users only.
- Interim rates will be established and implemented in FY 90. The rates will apply to all paper, film, and electronic media.
- No value added services will be developed and included in the Bureau's list of mission oriented services.
- Will provide a more disciplined approach to managing our technology facilities.
- Capacity management software will provide the necessary usage statistics to generate accurate systems, communications, and peripheral usage for all users on all mainframe and minicomputer platforms.
- Initially, utilization statistics will not be required on microcomputer systems.
- Sufficient overhead will be available on the systems to provide for the software.
- Fixed operations and management costs will continue to be funded through users of the system but not through a billing process accounting for actual usage.

B. Policy Considerations-

- Focus new attention on how copy fee funds are collected and utilized.
- Develop proposal to establish working capital fund for cost recovery.
- Develop a manual section outlining the policy and responsibilities to effectively carry out a cost recovery program. The manual section will be in harmony with Department policy and OMB A-130 and will apply the methodologies outlined in FIPS Pub 96.
- New Information Resources Management Legislation will be passed into law in FY 90. This is a re-enactment of the Paperwork Reduction Act of 1980 as amended in 1986. This new law will result in modifications to the existing OMB directives A-130 and A-25.

9.1 Develop Procedures for Cost Accounting/Cost Recovery

Task Manager: Kathy Speight, WO-773

This task will establish rates to be charged to the public and the initiation of Phase 1 in the charging system. Proper management will ensure that funding issues are resolved and that major decision milestones are met. Status of the contract and review of deliverables will be communicated to field contacts and Bureau managers. The WO budget officer will be kept informed of progress and will be involved in the review and comment periods. The entire project will be managed using a project management software.

A. Assumptions-

- Supplementary funding will be available in FY 90 to continue with the project.
- Outyear funding will be available to avoid disruption in the contract effort and implementation plan.
- The purpose of the contract and stated deliverables will be accurately communicated to all managers to dispel the fears of not getting the expected results and deliverables.
- There will be management involvement in formulating a cost accounting/cost recovery program in the Bureau.
- Information access policy will be finalized in FY 90 subject to refinement as we near target system deployment.
- The final deliverable portraying the cost recovery implementation plan will be completed on schedule and adopted by Bureau Headquarters management.
- Task will be contracted.

B. Policy Considerations-

- Policy will be refined to address implementation plan recommendations.

9.2 Implement Procedures

Task Manager: Dennis Anderson, WO-773

This task will provide the structured approach and timing for implementing the plan procedures and recommendations developed in the cost recovery study.

A. Assumptions-

- o Funding and workmonths will be available to exercise all action steps.
- o OMB A-130 will be modified to address new cost recovery issues being surfaced by other agencies.
- o There will be management involvement in formulating a cost accounting/cost recovery program in the Bureau.
- o In the foreseeable future, cost recovery will be applied to external users only.
- o No value added services will be developed and included in the Bureau's list of mission oriented services.

B. Policy Considerations-

- o Develop proposal to establish working capital fund or cost recovery.
- o Develop a manual section outlining the policy and responsibilities to effectively carry out a cost recovery program. The manual section will be in harmony with Department policy and OMB A-130 and will apply the methodologies outlined in FIPS Pub 96.
- o New information resources management legislation will be passed into law in FY 90. This is a reenactment of the Paperwork Reduction Act of 1980 as amended in 1986. This new law will result in modifications to the existing OMB directives A-130 and A-25.

Task Title: 9.1 Manage FEDSIM Contract

Task Manager: Kathy Speight, WO-773

Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
9.1.1	Public Rate Setting	K. Speight	Field Personnel FEDSIM, WO-770	06/89	02/90	Field Participation	Project Report	FC Briefing	Completed
9.1.2	Plan Charging System Phase I	K. Speight	Field Personnel FEDSIM, WO-770	03/90	10/90	Field Participation	IM Project Report, IM	FC Briefing	

Task Title: 9.2 Implement Procedures Developed by FEDSIM

Task Manager: Dennis Anderson, WO-773

Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
9.2.1	Charging System, Phase II Full Implementation	K. Speight	Field Personnel FEDSIM, WO-770	11/90	TBD	Funding	IM Project Report, IM	FC Briefing	
9.2.2	Charging System, Phase III Refine and Improve	K. Speight	Field Personnel FEDSIM, WO-770	TBD	TBD	Funding	IM Project Report, IM	FC Briefing	
9.2.3	Charging System, Phase IV Final Refinement	K. Speight	Field Personnel FEDSIM, WO-770	TBD	TBD	Funding	IM Project Report, IM	FC Briefing	

10 Software Improvement Program (Honeywell Systems)

A Software Improvement Program (SIP) preserves the value of past software investments and, at the same time, increases the reliability, efficiency, portability, and maintainability of the software to create an improved foundation upon which to maintain older systems and build new systems. SIP is simply structuring the code, documenting the systems, and preparing test data for all non-data base systems. A SIP is an incremental and evolutionary approach to the modernization of existing software to maximize its value, quality, effectiveness, and efficiency. Modernization includes those activities necessary to upgrade the software and its engineering techniques to current or state-of-the-art levels.

For data base systems that will not directly convert to the target system, they are being rewritten starting at defining the functional requirements. An initial survey was conducted that evaluated the effectiveness of these systems. From this evaluation, the BLM decided to either convert the systems, rewrite the systems, or archive them. There was no middle ground where BLM decided to functionally improve selected systems. There is a weakness in this approach. Functional improvements of existing system are not being considered nor is integration.

For purposes of the SIP and conversion, those systems currently running in the Honeywell environment are classified as Administrative Applications although many of them are in fact Resource and Technical Services applications.

The objectives of the SIP are to: perform the analysis and improvements necessary in order to prepare the existing inventory for conversion to the target system environment; convert Honeywell Systems into portable systems; eliminate machine-specific code; document all systems - convert to target standards; support target systems RFP requirements; ensure SIP requirements for hardware and software do not adversely impact the target system procurement; and eliminate the needs for existing Administrative System platforms as target system computers are installed and data communications links are established.

A. Assumptions-

- Functional enhancement and integration will not be pursued in the SIP nor in the conversion to the Target System.
- State Offices, BIFC, SC, and the Washington Office will be responsible for conducting and funding SIP on the local unique systems.
- There will be no effort to "crosswalk" Washington Office, SO, and BIFC specific functionalities prior to conversion.
- Field organizations and the Washington Office will fund their local conversion.
- All organizations will use the same basic process and methodology to perform their SIP.
- Funding and workmonths will be available to fund the entire effort.
- Sufficient staff and/or contracting capacity will be available to conduct the SIP.
- The SC will prepare all SIP processes, guidance, and methodology and provide assistance to all other offices involved in the process.

- o The SC will conduct a SIP on all Bureauwide, Service Center developed, mainframe, minicomputer, and microcomputer based applications (except those identified in Task No. 3).
- o The Modernization Project Office will be responsible for communicating site-office conversion requirements to the Target System contractor.

B. Policy Considerations-

- o Perform a SIP on all applications currently running on all platforms except Primes and the BIFC Data General (except end user applications).

10.1 Establish Management Priorities and Management Control for System Improvement/Conversion

Task Manager: John Moeller, WO-700

This activity will describe the flow for determining priorities for conducting the SIP on Bureauwide applications listed Under Task No. 1.2. The SC will complete its evaluation of all systems and develop the recommendations for specific levels of SIP effort and proposed schedules for completion for each application. This will be analyzed in conjunction with priority corrective and adaptive software maintenance activities. Assistant Directors and other system owners will ultimately determine priorities for the SIP efforts. The priority setting will be directly tied to short-term mission critical objectives. Funding, through the AWP directives, will be tied to priorities with proper followup review to ensure work is progressing on schedule. WO-700 will be the Headquarters Office focal point for coordinating this effort through appropriate managers and systems owners.

A. Assumptions-

- o Funding and workmonths will be available to accomplish the effort.
- o SIP analysis for all Bureauwide systems will be completed on schedule.
- o SIP analysis will include an update to the Data Element Dictionary.
- o System owners will be adequately briefed on the scope of the SIP effort and have an understanding of how it relates to their respective program area and migration to the Target System.

B. Policy Considerations-

- o Establish responsibilities for managing the SIP effort through the Headquarters Office.

10.2 Improvement Phase for Bureauwide Administrative Systems

Task Manager: Joe Strong, SC-340

This activity is concerned with the improvement of Bureauwide administrative systems resident on the Honeywell DPS-8000 and each State DPS-6+. The non-data base systems identified for retention will be improved through the refinement phase as defined in the GSA document

"Guidelines for Planning and Implementing a Software Improvement Program" (GSA Report OSA/FCSC-83/004). The data base systems are machine dependent data base systems. The functional and data requirements for these systems will be defined using structured techniques. For all systems, the improvement will include the achievement of as much machine independence as possible, utilization of structured code, functional modularity, code sharing and standardizing code, and data names. This activity will result in improved Bureauwide systems reimplemented on the Honeywell computers under release and change control.

- Inventory/Evaluation of Systems (See **Table 10.5-1**).
- Develop Baseline Test Data for Systems.
- Reengineer System Programs for Structure, Portability, and Maintainability.
- Update System Documentation.

A. **Assumptions-** None Identified

B. **Policy Considerations-** None Identified

10.3 Improvement Phase for State Administrative Systems

Task Manager: Dennis Anderson, WO-770

This activity is concerned with the improvement of state administrative systems resident on the Honeywell DPS-8000 and each State DPS-6+. The procedures developed and used by the SC will be available to the states as guidelines. The SC will provide assistance to offices requesting assistance.

- Inventory/Evaluation of Systems (See **Table 10.5-2**).
- Develop Baseline Test Data for Systems.
- Reengineer System Programs for Structure, Portability, and Maintainability.
- Update System Documentation.

A. **Assumptions-**

  - Field organizations will use the same basic process and methodology as the Service Center to perform their improvement.
  - Field organizations will fund their local state administrative system improvements.

B. **Policy Considerations-** None Identified

10.4 Conversion Phase for Bureauwide Administrative Systems

Task Manager: Joe Strong, SC-340

This activity is concerned with the conversion of the improved administrative systems resident on the Honeywell DPS-8000 and the DPS-6+ to the target system. This conversion effort will be accomplished through task orders by the target system contractor. Task orders will contain work packages prepared following the guidelines of the conversion Work Package Flow shown in the document "Conversion Work Packages" (GSA Report OSD/FCSC-82/002). As part of the pilot for the target system, representative administrative systems will be installed. The schedule for this activity is based on the contract award date of March 1991. Therefore, a delay in contract award will result in this schedule being adjusted.

A. Assumptions-

- o Data Element Dictionary will be on target system before application system conversion begins.
- o Systems data bases will be rehosted to target system as is. Efforts at data integration will then take place on the target system.
- o Target system will support Sequential and Indexed File Organizations.
- o Target system will support Relational Data Base Management Systems.
- o Target system will support COBOL and FORTRAN programming languages.
- o Target system will support Standard Query Language (SQL).
- o Target system will support report generator and query language package.
- o System owner will provide training for rehosted systems with support from SC-342E in addition to target system training.

B. Policy Considerations-

- o The SC will conduct a rehosting on all Bureauwide/SC developed applications (See **Table 10.5-1**) regardless of platform.

10.5 Conversion Phase for State Administrative Systems

Task Manager: Dennis Anderson, WO-770

This activity is concerned with the conversion of the improved administrative systems resident on the Honeywell DPS-8000 and each State Honeywell DPS-6+ to the target system. The procedures developed and used by the SC will be available to the states as guidelines. The SC will provide assistance to offices requesting assistance.

A. Assumptions-

- o Data Element Dictionary will be on target system before application system conversion begins.

- o Systems data bases will be rehosted to target system as is. Efforts at data integration will then take place on the target system.
- o Target system will support Sequential and Indexed File Organizations.
- o Target system will support Relational Data Base Management Systems.
- o Target system will support COBOL and FORTRAN programming languages.
- o Target system will support Structured Query Language (SQL).
- o Target system will support report generator and query language package.
- o System owner will provide training for rehosted systems with support from SC-342E in addition to target system training.
- o The field organizations will use the same basic process and methodology to perform their conversion as the Service Center.
- o The field organizations will fund their local state administrative conversions.

B. Policy Considerations-

- o Each field organization will perform a conversion on all applications currently running on their Honeywell DPS-6+ (See **Table 10.5-2**).

Table 10.5-1. Bureauwide Administrative Systems

NON-DATA BASE SYSTEMS

SYSTEM CODE	TITLE
AC	Aircraft Contract Monitoring
AM	SIBAC Reconciliation
CS	Cadastral Survey Field Note System
DF	Departmental Fleet Management System
EM	Eastern States Minerals
EQ	Personnel Management Evaluation Questionnaire
FA	Aging of Accounts Receivable
FC	Checks to Treasury
FD	Deposits in Transit
FE	Financial Management Edits
FF	Fire Cost Reporting
FG	General Ledger System
FH	Wildfire Automated Reporting System (F&W)
FI	Imprest Fund
FJ	Reimbursable Billing
FO	Rights of Way (Special Projects?)
FP	Perpetual Inventory System
FQ	Wildfire Automated Reporting System (BLM)
FR	Financial Management Reports
FT	Travel Advance System
FY	Financial Management Yearend
HB	Adopt-A-Horse
HM	Wild Horse and Burro Information
ID	Inventory Data System
JD	Job Documentation Reporting System
LM	Lease Management
OB	Operating Budget
PD	Public Domain Forestry
PF	USFS Forest Inventory System
PG	Program Management
PS	Automated Personal Property System
TA	Remote Entry of Time and Attendance
TB	Financial Tables (Finance Systems)
UP	Units of Progress
VE	Vendor Express
WL	Wildlife Information System
WM	Hydrologic Design Analysis
WP	Water Power System

DATA BASE SYSTEMS

SYSTEM CODE	TITLE
HS	Hardware Software Inventory System
MS	Material Disposal
MV	Automated Fleet Management System
DB	Automated Directives Digest
LB	Library Reference System
OM	Automated Inspection Records (Data base for the AIRS PC-based system)
RT	Research and Development Tracking System
WI	Water Data Management System

Table 10.5-2. State Systems

ARIZONA SYSTEMS

Master Title Plat
Public Affair List
Status of Obligation
Applications Catalog
Declining Deposit
Nonchargeable Accounts
ADP Security Design
Cadastral Survey
ADP Security
Financial Management
Fire Qualification
Arizona Training System
Personnel Vacancy
Procurement Bidders List

BIFC SYSTEMS

Warehouse Inventory System
Critical Items Reporting
Fire Qualification System
Automated Resource Ordering
Aircraft Reporting System
Emergency Fire Fighter Payroll
Fire Reporting System

CALIFORNIA SYSTEMS

Bureau Incident Reporting System
Mail List
Litigation Case System
ORCA and Lands and Minerals Tracking
System Menus
ORCA Record Seven Test
Royalty
Lands and Minerals Tracking System

COLORADO SYSTEMS

Declining Deposit Accounts System
Financial Management System
Fire Qualifications System
Fire Reporting System

EASTERN STATES SYSTEMS

None

IDAHO SYSTEMS

Employee Development Tracking System
Resource Monitoring
Delegations of Authority
Case Logging
Agricultural Economics Modeling
Withdrawal Review
Fire Lands Listing Data Base
Birds of Prey
Birds of Prey ASPEN Data Base

MONTANA SYSTEMS

Montana Library Reference System
Fire Qualifications System

NEVADA SYSTEMS

Archeology NVACS/IMACSA
Mapping
Procurement
Records
Automatic Data Processing
Personnel
Hydrology
Mining Plans and Notices
Lands Transfers
Lands Sales
Forestry
Mailing Labels
Engineering
On-Line Recordation Case Access
Fire Qualifications System
Soils/Range SITEFORM

NEW MEXICO SYSTEMS

Montana Library Reference System
Fire Qualifications System

OREGON SYSTEMS

Survey
Fire Qualifications System
Stipulations System

UTAH SYSTEMS

Training
Caselog
Status
Fire Qualifications System

WYOMING SYSTEMS

Montana Library Reference System
Fire Qualifications System

Task Title: 10.1 Establish Management Priorities and Management Control for System Improvement/Conversion April 1990

Task Manager: John Moeller, WO-700

Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
10.1.1	Update Application Software Inventory Bureauwide Systems	SC-340	WO-770	03/90	05/90	Release of Master Plan Version 3	Update List	Submission to WO-770	
10.1.2	Update Application Software Inventory Site-Specific Systems	States BIFC WO-774 SC		03/90	05/90	Release of Master Plan Version 3	Updated List	Submission to WO-770	
10.1.3	Determine System Owners	AD-700	AD-200 AD-600 AD-800	06/90	07/90		List of Systems	AD Sign Off	Assignment of System Ownership
10.1.4	Decision on System Conversion or Archive	AD-700	System Owners	07/90	08/90		Detailed List		
10.1.5	Establish Priorities for Application System SIP	HMT	WO-770 SC-340 System Owners	08/90	09/90	Criteria Established Target System Components Identified	Prioritized List	DD Sign Off	

Task Title: 10.2 Improvement Phase for Bureauwide Administrative Systems

April 1990

Task Manager: Joe Strong, SC-340

Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
10.2.1	Develop Methodology	Matney	SC-342E Staff	11/88	10/89	N/A	SET Document	Approved by SC-342	
10.2.2	Inventory Bureauwide Systems	Matney	SC-342E Staff	11/88	07/89	N/A	SIP Inventory		
10.2.3	Inventory/Evaluate Systems	Matney	SC-342E Staff	08/89	09/89	N/A	SIP Inventory/ Evaluation Forms		
10.2.4	Evaluate Systems	Matney	SC-342E Staff	04/89	07/89	N/A	Evaluation Forms		
10.2.5	Perform Pilot Improvement	Matney	SC-342E Staff	09/89	01/90	Draft SET	Improved Pilot System	Implementation of Pilot System	
10.2.6	Develop Guidance for States	Matney	SC-342E Staff	09/89	12/89	N/A	Conversion Guidance Document	Draft Memo	
10.2.7	Distribute Guidance to States	WO-770		10/89	01/90	Draft Memo		Memo Issuing Guidance Document	
10.2.8	Improve Systems	Matney		02/90	01/91	Completion of Pilot System	Reengineered Programs, Test Data, and Document	Completed Programs, Test Data, and Documentation	
10.2.9	Validate/Accept Improved Systems	Matney		01/90	02/91	Completion of Individual Improved Systems	Validated and Accepted System	System Acceptance by User	

Task Title: 10.2 Improvement Phase for Bureauwide Administrative Systems April 1990

Task Manager: Joe Strong, SC-340

Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
10.2.10	Implement Improved System	Matney		01/90	08/91	Completion of Individual Valid System	Production Version System	Release System to Production	

Task Title: 10.3 Improvement Phase for State Administrative Systems

April 1990

Task Manager: Dennis Anderson, WO-770

Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
10.3.1	Develop Methodology	Matney	SC-342E Staff	11/88	10/89	N/A	SET Document	Approved by SC-342	
10.3.2	Inventory Bureauwide Systems	Matney	SC-342E Staff	11/88	07/89	N/A	SIP Inventory		
10.3.3	Inventory/Evaluate Systems	States		08/89	09/89	N/A	SIP Inventory/ Evaluation Forms		
10.3.4	Evaluate Systems	States		04/89	07/89	N/A	Evaluation Forms		
10.3.5	Perform Pilot Improvement	States		09/89	01/90	Draft SET	Improved Pilot System	Implementation of Pilot System	
10.3.6	Develop Guidance for States	Matney	SC-342E Staff	09/89	12/89	N/A	Conversion Guidance Document	Draft Memo	
10.3.7	Distribute Guidance to States	WO-770		10/89	01/90	Draft Memo		Memo Issuing Guidance Document	
10.3.8	Improve Systems	States		02/90	01/91	Completion of Pilot System	Reengineered Programs, Test Data, and Document	Completed Programs, Test Data, and Documentation	
10.3.9	Validate/Accept Improved Systems	States		01/90	02/91	Completion of Individual Improved Systems	Validated and Accepted System	System Acceptance by User	

Task Title: 10.3 Improvement Phase for State Administrative Systems April 1990

Task Manager: Dennis Anderson, WO-770

Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
10.3.10	Implement Improved System	States		01/90	08/91	Completion of Individual Valid System	Production Version System	Release System to Production	

Task Title: 10.4 Conversion Phase for Bureauwide Administrative Systems

April 1990

Task Manager: Joe Strong, SC-340

Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
10.4.1	Document Functionality of Systems to be Redesigned	Matney	SC-342E Staff	03/90	06/92	N/A	Systems Requirements Specification	User Acceptance	
10.4.2	Prepare Task Orders for Improved and Redesigned Systems	Matney	SC-342E Staff	08/91	12/92	Award of Target Contract	Task Orders/ Packages	Memo Issuing Task Orders to Contractors	
10.4.3	Monitor/Evaluate Conversion	Matney	SC-342E Staff	09/91	10/93	Completion of Individual Task Orders			
10.4.4	Validate/Accept Converted Systems	Matney	SC-342E Staff	10/91	07/93	Completion of Individual Convert System	Converted System and Document Running on Target System	Memo Issuing Acceptance of System Contract	
10.4.5	Implement Converted Systems	Matney	SC-342E Staff	07/92	10/93	Completion of Individual Valid System	Production Version of System	Release to Production	

Task Title: 10.5 Conversion Phase for State Administrative Systems

Task Manager: Dennis Anderson, WO-770

Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
10.5.1	Document Functionality of Systems to be Redesigned	States		03/90	06/92	N/A	Systems Requirements Specification	User Acceptance	
10.5.2	Prepare Task Orders for Improved and Redesigned Systems	States		08/91	12/92	Award of Target Contract	Task Orders/ Packages	Memo Issuing Task Orders to Contractors	
10.5.3	Monitor/Evaluate Conversion	States		09/91	10/93	Completion of Individual Task Orders			
10.5.4	Validate/Accept Converted Systems	States		10/91	07/93	Completion of Individual Convert System	Converted System and Document Running on Target System	Memo Issuing Acceptance of System Contract	
10.5.5	Implement Converted Systems	States		07/92	10/93	Completion of Individual Valid System	Production Version of System	Release to Production	

11 Develop Transition Plans for Current Hardware Systems

Hardware systems transition activities span from today's current operation through the replacement and/or integration of existing equipment, capabilities, and operations into the target system environment. Detailed planning and careful coordination between BLM and the target system contractor are required for the successful implementation of these capabilities with minimum impact to ongoing Bureau operations.

A. Assumptions-

- Skills and ADP site inventories to support the transition process will be included as part of the State IMPs.

B. Policy Considerations- None Identified

11.1 Transition Plan for Honeywell DPS-8000 to Release

Task Manager: Joe Strong, SC-340

This activity is concerned with today's current operation through the replacement of the Honeywell DPS-8000.

A. Assumptions-

- The Honeywell DPS-8000 cannot be replaced until the following have been completed:
  - Administrative systems conversion completed
  - March/Merge completed - scheduled for completion in FY 92
  - Interim Release No. 2 completed - scheduled for completion sometime in FY 92
  - All user locations have workstations with ability to communicate with both State and Service Center file servers
  - Target communication systems installed
  - Status data contract completed
- Release Nos. 1 and 2 will not be scheduled for improvement or conversion.

B. Policy Considerations- None Identified

11.2 Transition Plan for Honeywell DPS-6+ to Release

Task Manager: Joe Strong, SC-340

This activity is concerned with today's operation through the replacement the Honeywell DPS-6+s.

A. Assumptions-

- The Honeywell DPS-6+s cannot be replaced until the following have been completed.
  - Administrative systems conversion completed
  - Match/Merge completed - scheduled for completion in FY 92
  - Interim Release No. 2 completed - scheduled for completion sometime in FY 92
  - Target hardware installed and functional
  - Software installed at State Office level
  - Target system communications installed

B. Policy Considerations- None Identified

11.3 Transition Plan for Prime Computers to Release

Task Manager: Joe Strong, SC-340

Several different models of Prime computers are located throughout the Bureau. Level-As are located mostly at State Offices, Level-Bs are located mostly at District Offices, and Level-Cs and Level-Ds are located mostly at Resource Areas. Currently, the Service Center Prime computers are supporting Bureauwide development, operations, and maintenance of the GIS application; development of the Alaska Land Records Systems; GCDB data collection; and Operating System maintenance. The Service Center Prime systems are also targeted for corporate data collection duty in support of the SLMS-II distributed processing application. State Office Prime computers are supporting GIS operations, LLD and status data collection, and site specific systems. The Prime systems at the State Offices are also targeted for inclusion in the Bureauwide network which will support data sharing capabilities interstate and is required for Release No. 2 of the interim system.

A. Assumptions-

- Completion of a new maintenance/upgrade contract (this task may be replaced by an extension to the current contract).

- Completion of Star network replacement.

- Intrastate communications network will support network requirements for Interim Release No. 2.

- Completion of modernization phase.

- Application migration to new hardware/software platform is completed.

- Off-the-shelf software is available for capacity planning.

B. Policy Considerations- None Identified

11.4 Transition Plan for Data General to Release

Task Manager: Jim Turner, SC-677

11.5 Transition Plan for Burroughs to Release

Task Manager: Alaska State Office IRM

11.6 Transition Plan for Wang to Release

Task Manager: Paul Lance, WO-774

11.7 Transition Plan for Hewlett Packard to Release

Task Manager: Jim Turner, SC-677

11.8 Transition Plan for Image Analysis to Release

Task Manager: Jim Turner, SC-677

11.9 Transition Plan for PCs/Work Stations to Release

Task Manager: Jack Webber, WO-770

Task Title: 11.1 Transition Plan DPS-8000 To Release

Task Manager: J. Strong, SC-340

Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
11.1	Develop Transition Plans for Current Hardware Systems					Data - Collection Data - Preparation Target - Transition Target - Logistics			
11.1.1	Improve Admin System (See Admin Sys Conversion)	Matney	Sys Analyst Sys User Matney	11/88	08/91	Availability of Funds	Improved Systems	Release Improved System to Production	
11.1.2	Convert Admin System (See Admin Sys Conversion)	Matney	Sys Analyst Sys User Matney	08/91	10/93	Completion of Improved Admin System	Converted System	Release Converted System to Production	
11.1.3	Install Data Communication Network	Cameron Strand	Contractor SC-310	09/92	10/93	Completion of Target Network	Target Network Replacement		
11.1.4	Develop/Implement Tape Retention Strategy	Molinar	Spencer SC-343B	01/93	10/93	Data 8.1	Plan	Approved by SC-340	
11.1.5	Release DPS-8000	Cameron	Davis	10/93	10/93	Target System Award Date 06/91 Completion of Converted Admin System	Target System Implementation		

Task Title: 11.2 Transition Plan DPS-6+ to Release

April 1990

Task Manager: J. Strong, SC-340

Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
11.2.1	Upgrade DPS-6+ for Match/Merge	Webber	Cameron	TBD	TBD	Hardware Upgrade	Operable System		
11.2.2	Implement CM/Release Control of DPS-6+	Webber	Cameron	TBD	TBD	Training of Field Personnel/Manual			
11.2.3	Improve Admin System (See Admin Sys Conversion)	Matney	Sys Analyst Sys Users Matney	11/88	08/91	N/A	Improved Systems	Release Improved System to Production	
11.2.4	Convert Admin System (See Admin Sys Conversion)	Matney	Sys Analyst Sys Users Matney	08/91	10/93	Completion of Improved Admin System	Converted System	Release Improved System to Production	
11.2.5	Install Data Comm Network	Strand	SC-310	09/92	10/93	Target System Installation	Improved Comm Cap		
11.2.6	Develop/Implement Tape Retention Strategy	Spencer	Spencer SC-343B	01/93	10/93	Data 8.1	Plan	Approved by SC-340	
11.2.7	Release DPS-6+ by State	Webber	Cameron	10/93	10/93	Target System Award Date 06/91 Completion of Converted Admin System Installation of Comm Net	Target System Installation		

Task Title: 11.3 Transition Plan for Prime to Release

Task Manager: J. Strong, SC-340

Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
11.3.1	Prepare and Implement a Release Control Plan	Ader	Foster	10/89	01/90	Budget for Training Field	Release Control Manual	SC-300 Approval	
11.3.2	Prepare and Implement a Plan for Capacity Management	Cameron	Valerio	07/89	12/90	Budget for Training Field	Cap Plug Manual	SC-300 Approval	NSR Contract
11.3.3	Install SLMS-II on SC Prime	Matney	Lowe	07/89	05/90	Comm Software Implemented	Operating System	Program Office Approval	
11.3.4	Prepare New Maintenance/Upgrade Contract	Webber	Davis	10/89	12/90	N.A.	Maintenance Contract	RFP Released	
11.3.5	Prepare Sites as Acquired	Strong	Cameron Foster	10/89	03/91		Operating Platform		
11.3.6	Install Interim Release No. 1 (Alaska)	Strong	Cameron Carlander	06/90	06/90	Hardware/Software Inst. - Pers. Trng	Operable System	Alaska State Office Approval	
11.3.6a	Install Interim Release No. 1 (New Mexico)	Ader	NM - IRM Carlander	07/90	07/90	Hardware/Software Inst. - Pers. Trng	Operable System	State Office Approval	
11.3.6b	Install Interim Release No. 1 (Nevada)	Ader	NV - IRM Carlander	07/90	07/90	Hardware/Software Inst. - Pers. Trng	Operable System	State Office Approval	
11.3.7	Integrate SO Prime Computers on New Interim Network	Cameron	Wilbert	08/89	02/91	Target Network Implementation	Operable Network		
11.3.8	Match/Merge Migration to Honeywell 6+	Strong	Cameron Carlander	09/89	02/91	Hardware Upgrades	Operable System		
11.3.9	Install Interim Release No. 2	Strong	Valerio Carlander	10/89	02/91	Installation of New Interim Network	Operable System		

Task Title: 11.3 Transition Plan for Prime to Release

Task Manager: J. Strong, SC-340

Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
11.3.9a	Install Interim Release No.2(AK)	Strong	Valerio/Carlander	03/91	06/91	Install Interim Network	Oper Sys		
	Install Interim Release No.2(AZ)	Strong	Valerio/Carlander	03/91	06/91	Install Interim Network	Oper Sys		
	Install Interim Release No.2(CA)	Strong	Valerio/Carlander	03/91	06/91	Install Interim Network	Oper Sys		
	Install Interim Release No.2(CO)	Strong	Valerio/Carlander	03/91	06/91	Install Interim Network	Oper Sys		
	Install Interim ReleaseNo.2(ESO)	Strong	Valerio/Carlander	03/91	06/91	Install Interim Network	Oper Sys		
	Install Interim Release No.2(ID)	Strong	Valerio/Carlander	03/91	06/91	Install Interim Network	Oper Sys		
	Install Interim Release No.2(MT)	Strong	Valerio/Carlander	03/91	06/91	Install Interim Network	Oper Sys		
	Install Interim Release No.2(NV)	Strong	Valerio/Carlander	03/91	06/91	Install Interim Network	Oper Sys		
	Install Interim Release No.2(NM)	Strong	Valerio/Carlander	03/91	06/91	Install Interim Network	Oper Sys		
	Install Interim Release No.2(OR)	Strong	Valerio/Carlander	03/91	06/91	Install Interim Network	Oper Sys		
	Install Interim Release No.2(UT)	Strong	Valerio/Carlander	03/91	06/91	Install Interim Network	Oper Sys		
	Install Interim Release No.2(WY)	Strong	Valerio/Carlander	03/91	06/91	Install Interim Network	Oper Sys		
11.3.10	Award New Maintenance Upgrade Contract	Webber	Cameron Ader		06/91		New Maintenance Contract		
11.3.11	Replace L&M Functions and Data with LIS Phase 1	SC-300	Cameron MacPherson	TBD	TBD				
11.3.12	Replace GIS Functions and Data with Target System	SC-300	Cameron Ader MacPherson	1996	1997				

Task Title: 11.3 Transition Plan for Prime to Release

Task Manager: J. Strong, SC-340

Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
11.3.13	Replace Resource Functions and Data with LIS Phase II	SC-300	Cameron MacPherson	TBD	TBD				
11.3.14	Develop/Implement Tape Retention Strategy	Molinar	SC-324 Spencer	TBD	TBD				
11.3.15	Release Primes	Cameron	Davis	TBD	TBD				
	Alaska	Cameron	Davis	TBD	TBD				
	Arizona	Cameron	Davis	TBD	TBD				
	California	Cameron	Davis	TBD	TBD				
	Colorado	Cameron	Davis	TBD	TBD				
	Eastern States Office	Cameron	Davis	TBD	TBD				
	Idaho	Cameron	Davis	TBD	TBD				
	Montana	Cameron	Davis	TBD	TBD				
	Nevada	Cameron	Davis	TBD	TBD				
	New Mexico	Cameron	Davis	TBD	TBD				
	Oregon	Cameron	Davis	TBD	TBD				
	Utah	Cameron	Davis	TBD	TBD				
	Wyoming	Cameron	Davis	TBD	TBD				
	Service Center	Cameron	Davis	TBD	TBD				

Task Title: 11.4 Transition Plan Data General to Release

April 1990

Task Manager: J. Turner, SC-677

Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
11.4.1	Prepare and Implement a Release Control Plan	Turner	SC-677	TBD	TBD				

Task Title: 11.5 Transition Plan Burroughs to Release

Task Manager: State Office IRM

Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
11.5.1	Convert Application Software	Alaska State Office	Carlander CASO AKSO	1989	1990				
11.5.2	Prepare and Implement a Release Control Plan (AK)	Alaska State Office							
11.5.3	Prepare and Implement a Release Control Plan (NM)	New Mexico State Office							

Task Title: 11.6 Transition Plan Wang to Release

April 1990

Task Manager: TBD

Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
11.6.1	TBD								

Task Title: 11.7 Transition Plan Hewlett Packard to Release

April 1990

Task Manager: Jim Turner, SC-677

Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
11.7.1	Convert Application Systems	Tim Turner	SC-677						
11.7.2	Prepare and Implement a Release Control Plan	Tim Turner	SC-677						

Task Title: 11.8 Transition Plan Image Analysis System to Release

April 1990

Task Manager: TBD

Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
11.8.1	TBD								

Task Title: 11.9 Transition Plan PCs/Work Stations to Release

Task Manager: TBD

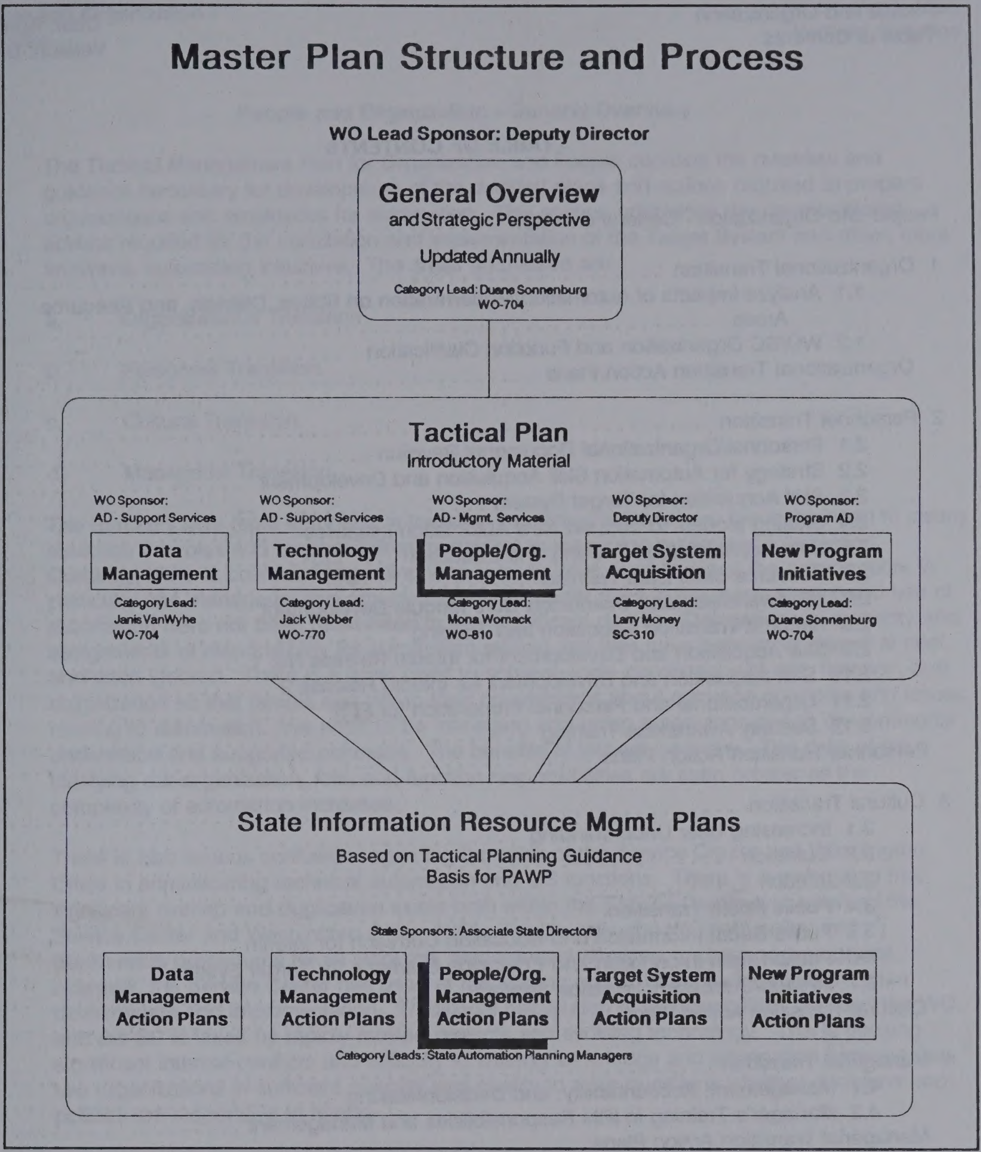
Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
11.9.1	TBD								

The Bureau of Land Management

Master Plan for Automation

People/Organization

For Further Information,
contact the Assistant Director of Support Services
FTS 343-3897


Master Plan Structure and Process
WO Lead Sponsor: Deputy Director
General Overview
and Strategic Perspective
Updated Annually
Category Lead: Duane Sonnenburg
WO-704
Tactical Plan
Introductory Material
WO Sponsor:
AD - Support Services
Data Management
Category Lead:
Janis VanWyhe
WO-704
WO Sponsor:
AD - Support Services
Technology Management
Category Lead:
Jack Webber
WO-770
WO Sponsor:
AD - Mgmt. Services
People/Org. Management
Category Lead:
Mona Womack
WO-810
WO Sponsor:
Deputy Director
Target System Acquisition
Category Lead:
Larry Money
SC-310
WO Sponsor:
Program AD
New Program Initiatives
Category Lead:
Duane Sonnenburg
WO-704
State Information Resource Mgmt. Plans
Based on Tactical Planning Guidance
Basis for PAWP
State Sponsors: Associate State Directors
Data Management Action Plans
Technology Management Action Plans
People/Org. Management Action Plans
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Category Leads: State Automation Planning Managers

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People and Organization - General Overview

The Tactical Management Plan for Organization and People contains the overview and guidance necessary for development of the detailed plans and actions required to prepare organizations and employees for automation. This section addresses the people related actions required for the installation and implementation of the Target System and other, more imminent, automation initiatives. The areas addressed are:

a. Organizational Transition

b. Personnel Transition

c. Cultural Transition

d. Managerial Transition

The Bureau's very rapid entry into automation has brought into sharp focus the need to clearly establish the roles and responsibilities pertaining to managing automated information. Currently, there is confusion regarding who is to do what at all levels of the organization. In particular, the managerial and program specialist/leader roles in the management and use of automation have not been assimilated to any significant degree. Delegations of authority and assignments of responsibility for automation related activities have been inconsistent at best, and often ignored. There is a great need to achieve some consistency of role, function, and organization so that people can talk to their counterparts about common concerns and issues relating to automation. We need to be managing and using automation based on commonly understood and supported concepts. The benefits of this will be many. The risks of not clarifying our organization, role, and function responsibilities are even greater as the complexity of automation increases.

There is also serious confusion regarding the roles of the Service Center and Washington Office in administering technical automation and LIS functions. There is a perception that significant overlap and duplication exists both within the Service Center and between the Service Center and Washington Office (WO). Traditionally, the WO sets policy and Bureauwide procedures for all resource, management services, and support programs. However, the Service Center has been at the leading edge of automation/modernization development and implementation. Traditional distribution of responsibilities between the WO and the SC is taxed by rapidly moving projects and evolving technology. This is causing significant internal conflicts and difficulty in sharing knowledge and information between the two organizations in sufficient quantity and quality to raise questions whether decisions and policies are responsive to needs.

The Bureau decision making processes are highly decentralized. In areas involving automation, it is hard to identify the correct decision makers and harder still to obtain decisions in a time frame that is appropriate in this rapidly moving area. Clarifying and simplifying the decision making process that supports automation is critical.

Likewise, the Bureau must be successful in acquiring the appropriate automation skills. Both the types of skills needed and the method of obtaining the needed skills must be determined. Skills will be acquired through a combination of training, recruitment, and contracting. Geographic location will be a factor in these decisions, as will the cost, time, and effectiveness of each skill acquisition method. The Training Needs Analysis indicated that there are many areas where training of the general employee population will be required. Additionally, there are a multitude of specific technical training needs that must be addressed.

Automation is creating conflicts within the Bureau culture. This, in turn, is impacting user acceptance and attitudes. Traditional values such as decentralization, office and program autonomy, priority of on-the-ground work, and interpersonal communication patterns are being impacted by automation in many ways. Automation also has significant impacts on individuals-- causing concerns about the work they will be doing in the future, the availability of jobs, their competitive status regarding new skill requirements, and the potential changes in their daily work life. Automation impacts on both individuals and the culture need resolution to provide a fully positive environment for the implementation of new automation initiatives.

Automation is moving so rapidly--and the pace keeps increasing--that there are several automation initiatives that fall into a category of imminent actions. The people and organizational issues related to these imminent actions cannot wait until the longer term actions are in place, therefore they have been handled separately to ensure visibility and attention. Getting ahead of these imminent needs is essential.

1 Organizational Transition

Clarification of roles and responsibilities relating to IRM and consistent organizational placement of responsibilities throughout the Bureau is essential to the successful management of the Bureau's information resources. Throughout the Bureau, the LIS/modernization programs are not well understood and the perception exists that there is an absence of clear leadership from many line managers to direct or carry out these programs. Automation efforts are often seen in conflict with current work. Traditional functions and responsibilities that have been automated have been placed in new locations. New positions such as the many coordinator positions, Data and Records Administrators, and Data Base Managers have been created and engendered an additional confusion of roles, responsibilities, and organizational locations.

In a report titled "Impacts of Modernization and Automation on the Bureau of Land Management," a subcommittee of the Field Committee identified a number of Bureauwide problems related to delegation, accountability, communication, and organizational stability. They recommended conducting a more specific study of the existing effects of automation and the effects that modernization will likely have on our Field Office organization structures.

1.1 Analyze Impacts of Automation/Modernization on States, Districts, and Resource Areas.

Task Manager: T. Allen, WO-800

Take the actions necessary to analyze the current and anticipated IRM-Automation work at the State, District, and Resource Area Offices. Define the IRM-Automation roles, functions, and appropriate organizational structures; and obtain decisions regarding these organizational issues from the Bureau Management Team/Director; and ensure implementation.

A. Assumptions-

- Currently there is a wide diversity of organizational structures and assignments of responsibility at State, District, and Resource Area Offices.
- BLM will benefit by establishing consistent placement of IRM-automation responsibilities and organizational structures.
- Clear channels of communications are essential to implement IRM-automation initiatives.
- Clarification of organizational structure and responsibilities is a necessary prerequisite for effective program management, training, and recruitment actions.
- Informal or ad hoc organizations are not conducive to effective IRM-automation implementation and management.
- Consistent and clearly understood delegations of authority and placement of responsibility are essential to effectively accomplish the work of the Bureau.
- Clarification of the IRM role, its placement and implementation are critical to effective program management.
- Automation is essential to effectively accomplish the Bureau's mission and

must be incorporated into the organization as rapidly as possible.

B. **Policy Considerations-**

- The Bureau will require consistent implementation of IRM-Automation structure and function decisions made by the Director/BMT. (IM-90-212)
- WO-800 will provide guidance and oversight to the implementation of decisions relating to organization and function. (IM-90-212)
- Delegations of authority and functional statements at all levels will be revised to reflect IRM organizational and functional decisions. (IM-90-212)

1.2 WO/SC Organization and Function Clarification

Task Manager: Dean Stepanek, WO-101

There is confusion in the distribution of organizational and functional responsibilities for automation/modernization between the Service Center and the Washington Office. Both short term and long term placement of responsibilities is in question. Currently, there appears to be significant overlap both within the Service Center and between the Service Center and Washington of IRM related responsibilities. A clear understanding of roles and responsibilities is critical for the successful and cost effective implementation of automation initiatives. Communications and policy development cannot proceed effectively without a clear understanding of both near-term and long term responsibilities.

Staffing levels will also be affected by the distribution of responsibilities and the clarification of roles.

A. **Assumptions-**

- WO and SC roles and functions are currently fragmented and should be consistent with those determined correct at the State level.
- The integration of IRM-Automation into the program functions has not been consistent with their traditional roles.
- The roles of program specialists/leaders in IRM-Automation at the Service Center and Washington Office have not been clearly defined.
- Responsibility for management of the operational Target System has not been clearly defined.
- Future roles and responsibilities of the Service Center IRM organization have not been clearly defined.
- Effective management of IRM-automation is hindered by confusion over WO and SC roles and functions.
- The relationship between LIS and IRM are not clearly understood.

- SC's responsibility for providing user assistance to the states for Bureauwide applications (i.e., technical assistance, user guides, coordination of enhancement/change requests, training) is not clear.

B. Policy Considerations-

- WO and SC delegation of authority, functional statements, PDs, PIPRs, and vacancy announcements will be required to accurately reflect IRM-Automation functions and responsibilities resulting from decisions on the IRM Organization Study and this task.

- WO-830 and WO-840 are responsible for ensuring accurate and up-to-date organizational and personnel documents are in place.

Task Title: 1.1 Impacts of Automation/Modernization on States, Districts, and Resource Areas

April, 1990

Task Manager: Tom Allen

Step Order	Action Steps	Responsible Official	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
1.1.1	Complete Organization Impact Report	Hofman	Team	Feb-88	Apr-88	Travel (4 meetings) Printing	Report	Approval by WO-800	Field Committee, Sub-Committee
1.1.2	Authorize IRM Organization Study	Director		Nov-88	Nov-88	Hofman Report	Memo	Approval Memo	VanZanden-Team Lead
1.1.3	Complete the IRM Organization Study	VanZanden	Team, SO, DO	Nov-88	Jul-89	Travel, field visits, 4 meetings	Study Report	WO-800 Approval	
1.1.4	Prepare Briefing for Director, FC and BMT	Hofman, VanZanden	Team	Jul-89	Oct-89	Completed Study	Briefing material	Briefing Performed	
1.1.5	Make Decisions on Report Recommendations	Director, BMT, FC		Jul-89	Jan-90		Decision Documents	Director Approval	
1.1.6	Prepare Decision Implementation Guidance	WO-800	Oversight Group	Aug-89	Jan-90	Travel, 1 meeting	Instruction Memos	WO-800 Signature	Incorporate in FY 1990 and 1991 AWP

Task Title: 1.1 Impacts of Automation/Modernization on States, Districts, and Resource Areas April, 1990

Task Manager: Tom Allen

Step Order	Action Steps	Responsible Official	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
Step Order	Action Steps	Responsible Official	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
1.1.7	Prepare Office Implementation Schedules	Office Managers and Management Analysts		Sep-89	Mar-90	Decision Document	Individual Office Schedules	Approved by WO-840, signed by Office Managers	
1.1.8	Prepare NM Organization Transition Subplan	NM-LIS Project Manager	NM Management Analyst	Oct-89	Mar-90	Guidance from IRM Organization Study, Decisions	Organization Transition Action Plan	WO-840	Reference NM Pilot 10/14 18.7.1
1.1.9	Complete Implementation	Office Managers	Office Staff	Jan-90	Sep-90		Organization Documents, 1202 Package	Approved by Office Head	
1.1.10	Monitor/Evaluate	WO-800	WO-830, WO-840	Feb-90	Mar-91		Final Evaluation Reports from All Offices	Approved by WO-840	

Task Title: 1.2 WO/SC Organization and Function Clarification

Task Manager: Stepanek

Step Order	Action Steps	Responsible Official	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
1.2.1	Authorize the WO/SC Organization Study and Designate Team Lead	Director		Jul-89	Jan-90		Memorandum	Signed by Director, IM 90-232	Consultation with BMT, prepared by WO-800
1.2.2	Establish Team	Hofman		Aug-89	Jan-90		Memorandum	Signed by Team Lead	
1.2.3	Develop Action Plan	Hofman		Sep-89	Feb-90	Decisions from VanZanden Study	Action Plan	Deputy Director	
1.2.4	Complete Action Plan Tasks	Hofman	Team, SC and WO Reps, field Personnel	Oct-89	May-90	Study Report from VanZanden, WO GME and SC Scoping			
1.2.5	Complete SC GME	DAD Mgt. Services	GME/APR Team	Nov-89	Dec-90		Evaluation Report	Deputy Director	WO-860 established it. Director decides it is appropriate.
1.2.6	Prepare Briefing for Director and BMT	Hofman	SC and WO Managers	May-90	Jun-90		Briefing Document	Briefing Given	
1.2.7	Make Decisions on Report Recommendations	Director/BMT	FC	May-90	Jul-90		Decision Document	Signature by Director	
1.2.8	Prepare Decision Implementation Guidance	Deputy Director	Team, FC, BMT	Jun-90	Jul-90		Guidance Memos	Signature by Director	
1.2.9	Prepare Individual Office Implementation Schedule	ADs and SC Director		Jun-90	Sep-90		WO and SC Schedules	Deputy Director	
1.2.10	Implement WO/SC Schedules	ADs and SC		Oct-90	Sep-91			Revised	Director Approves
1.2.11	Monitor/Evaluation	WO-800	WO-860, WO-840. WO-830	Nov-90	Oct-91		Evaluation Reports from the ADs and SC	WO-800 Approves	

2 Personnel Transition

The automation functions and responsibilities identified as appropriate for the future must be institutionalized to prepare the employees of BLM to move forward into an era of automation/modernization. To create the framework for accountability and responsibility, organizational documents such as functional statements must reflect the automation responsibilities appropriate to each organization. Additionally, pertinent IRM functions must be reflected in position descriptions, individual development plans, and performance evaluation criteria, and the basis for incorporating IRM needs into recruitment for vacant positions must be developed.

BLM must develop an integrated skills needs program to ensure BLM has identified the automation skills necessary to perform the functions of each job. The method of acquiring the correct skills must also be determined. An integrated strategy of obtaining skills by training, recruitment, or contracting must be developed. The strategy must identify criteria for each method of skill acquisition, and provide concrete assistance to the field in obtaining the skills. Where training is required, individual development plans need to be modified to identify the new training needs; training courses developed or contracted for, and new training plans prepared. Where recruitment is necessary, rating plans and position evaluations for vacancy announcements need to be developed to reflect the automation skills, knowledge, and abilities necessary for satisfactory job performance. Where contracting is appropriate, a statement of work must be developed to ensure that contract performance meets expectations.

Individual tasks will identify the major Bureauwide training efforts that must occur to ensure the effective implementation of Interim. Courses that are closely tied to a specific effort and are not a major Bureau impact will be dealt with in concert with that topic. This listing will be dynamic with courses added and removed according to their status. As soon as the course becomes institutionalized in the Bureau training catalogue or has run its useful course, the action steps relating to that training will be considered accomplished.

Some automation/modernization actions are going to occur so quickly that many of the people and organization tasks will not be completed and in place. In particular, the installation and implementation of Interim Release 1.0 and the FFS are imminent. These actions must be dealt with separately to ensure that appropriate support and planning occur in a timely manner. All facets of organizational and employee concerns apply to these actions but some areas are more critical than others. Skills acquisition and user acceptance concerns are particularly important to both of these efforts.

2.1 Personnel/Organizational Documents Revision

Task Manager: Pat Harvey, WO-840

Take actions necessary to produce and ensure Bureauwide implementation of standard IRM elements in functional statements, position descriptions, performance evaluations, rating plans, position analyses, Individual Development Plans, and Training Plans for all new and existing positions requiring IRM/automation duties and skills.

Positions for which revised personnel documents will be prepared include: managers, program leaders, users, data administrators, records administrators, DSD Administration, IRM Chief, LIS Coordinators, computer operators, computer assistants, mapping science positions, technical aspects of GIS and ALMRS, GCDB, and others as needed.

A. Assumptions-

- o BLM currently lacks consistent understanding and application of IRM/Automation duties and functions in organizational and personnel documents. This includes position descriptions, classification, vacancy announcements, performance evaluations, training plans, and functional statements.
- o BLM will continue to have difficulty hiring technical ADP positions/skills (i.e., competition and recruitment within government and with private industry) until adequate personnel actions are in place.
- o Delegation of classification authority will remain unchanged.
- o Consistency in the personnel actions for automation skills and positions will benefit BLM at all levels (hiring, timing, complaints, training). Specific problems may remain e.g., at remote locations.

B. Policy Considerations-

- o Position descriptions, PIPRs, training plans, and vacancy announcements for all positions will be kept current and amended as needed to reflect IRM automation skills, roles, and functions consistent with the IRM Organization Study and work developed by this task.
- o Appropriate training to ensure employees can perform their work will be made available to all employees within the constraints of budget and time.

2.2 Strategy for Automation Skill Acquisition and Development

Task Manager: Noel Granzow, PTC

BLM will have to increase the types of skills, and the number of skilled persons, at all its organizational levels to successfully implement Automation-IRM-Modernization (AIM). Given the wide range of work to be done across the Bureau, it is apparent that the skills needed to do the work must be acquired through a combination of education and training, recruitment, and contracting. This Task will develop a Bureau-wide strategy to acquire AIM related skills through a combination of training, recruitment, and contracting. Guidance and direction for implementing this integrated AIM skills acquisition strategy, along with a process to incorporate the strategy into the planning, programming and budgeting process, will be developed.

A. Assumptions-

- o BLM will require Automation-IRM-Modernization (AIM) skills at all organizational levels to effectively implement modernization of the Bureau.
- o Skills will be required through a coordinated strategy for training, recruitment, and contracting.

- BLM will improve the management of all training as a prerequisite to AIM training.

- Current recruiting strategies are not fully successful in obtaining the specialized AIM related skills.

- There is no BLM strategy for obtaining AIM skills for specific applications through contracting.

- Contracting may not be a viable option in some geographic locations; consequently, managers must have flexibility in applying skill acquisition strategies.

- The focus of a coordinated AIM strategy is the automation of much of the Bureau's work.

- BLM has already begun automating work and this "modernization" of the Bureau will be an ongoing process.

- High priority will be given to AIM skill acquisition during interim, and as a requirement, for the target system as these hardware/software packages, designed to accommodate a level of consolidation, standardization and processing of BLM records and resources data, are major components of the modernization process.

- Training will be adequately funded and provided as required.

- There will be no widespread displacement of personnel.

- Upward mobility and affirmative action will be integrated with the skill acquisition strategies.

B. Policy Considerations-

- The AD/MS will provide leadership for AIM skill acquisition.

- WO-810 will provide oversight for education and training skill acquisition strategies.

- WO-830 will provide oversight for recruitment skill acquisition strategies.

- WO-850 will provide oversight for contracting skill acquisition strategies.

- Coordination will be required between this Task and other Master Plan Tasks which include training, recruitment or contracting to ensure all such efforts are consistent with the overall strategy for skill acquisition and development.

- Training strategies will apply to employees who will be involved with any work which is, or will be, automated.

- Recruitment strategies will apply to highly specialized technical AIM-specific work.

- Contracting strategies will apply to technical AIM-specific work that, for a number of reasons, managers may choose to have done under contract rather than accomplished in-house.

2.3 Skill Acquisition for Target System

Task Manager: Mike Kirby, SC-311

The skills required throughout the BLM to support the target system environment will differ from the Bureau's current inventory of skills. Skills acquisition includes all measures required to ensure that the target system is adequately supported by trained personnel upon implementation and throughout its life cycle. It includes the analysis of needed skills; the design, development, and implementation of skills acquisition strategy including training, contracting, and recruitment for the Target System. Training aspects will be particularly important and will include many different forms such as traditional lesson plans, stand-up instruction, self-paced materials, integrated operational and training, etc. Contracting will include the analysis of the costs and benefits of acquisition of skills from vendors in various geographic locations and for various functions, and the development of standard contracting documents to assist the field with this effort. Recruitment will be required for both new skills and for replacement of existing skills. Identification of the skills that need to be obtained by recruitment, examination of skill sources, and development of recruitment methods will all be required.

A. Assumptions-

- It is assumed that the training aspects will be accomplished by a joint venture with the target system contractor, and that the division of effort and the specific responsibilities of each will be spelled out in the target system contract and subsequent task orders supplemented by planning documents.

- Bureau resources and policy will support critical training needs in automation/ modernization.

- Implementation of decisions from the IRM Organization Study will standardize the assignment of functions across the Bureau.

- All skill acquisition work under the target system contract will be consistent with the strategy development in Task 2.2.

- Scope and content of Interim and Target System will not change significantly.

- Contractor will be responsible for the majority of training materials and for training the trainers.

B. Policy Considerations-

- Policy regarding scope of Target System is needed.

- o The Bureau needs to define the policy and decision criteria for obtaining skills by training, contracting, and recruitment.
- o All Target System Skill acquisition will be coordinated with WO-800.

2.4 Staffing Models to Support New Automation Initiatives

Task Manager: Ron Hofman, WO-800

This task will provide guidance for staffing to support new automation initiatives over the next 3 to 4 years. The offices included in the modeling effort include State Offices, District and Resource Area Offices, the Service Center, and Washington Office. The basis for the models will be derived from best knowledge of the future, experience of the pilot and other offices with automation, and projections of the future role of support offices such as the Service Center.

2.5 Data Administration Training and Education

Task Manager: Janis VanWyhe, WO-704

This task describes the steps involved in preparing a Training Plan for training of the Bureau Data Administrators in the Areas of data management, data integrity and quality, data sharing and exchange, and data modeling.

A. Assumptions-

- o The Bureau recognizes the value of its data and desires to maintain and enhance it.
- o Some training courses will be vendor provided; too technical for BLM to provide.
- o There are abundant companies which provide a wide selection of courses related to automation.
- o Data Administrators must be properly trained to carry out their duties.
- o Regularly scheduled meetings will be used as one vehicle to educate and inform managers and the general Bureau population about data administration.
- o The concepts of Data Administration are not widely understood by managers or the general Bureau population.
- o Data Administrators will require training to ensure all DAs fully understand and are performing all of the responsibilities assigned to DAs.
- o Overall skill acquisition for data administration will be consistent with P&O Task 2.2.

B. Policy Considerations-

- Delegations of authority and definitions of responsibility are needed to ensure this function operates effectively. In particular, the roles/functions of DA, DBA, DBM, need to be clearly delineated.

- Training must be coordinated with WO-800.

2.6 Resource Base Data Training

Task Manager: Mike Dwyer, NMSO

2.7 LIS Awareness and Orientation Core Module Development

Task Manager: J. Stone, PTC

Ongoing orientation to the Automation/LIS program is necessary for employee development and competence. A decentralized, facilitated training package that can be augmented and tailored to reflect state specific activities is being designed at the Phoenix Training Center. Based partially on work already done in the Bureau, this course will be an overview of Automation/LIS. PTC will conduct train-the-trainer sessions to prepare instructors for delivery of the customized package.

Where feasible and appropriate, a segment or condensed form of the core module could be integrated into existing PTC courses.

A. Assumptions-

- The Bureau population needs to learn about automation, including LIS, during development as well as implementation to be competent in implementing the BLM mission.

- The States would be willing to conduct a "core module" presentation using the package provided.

- Funding and FTE will be made available for development and presentation of the LIS Awareness and Orientation Module.

- Scope of modernization and other automation efforts will not change significantly.

B. Policy Considerations-

- PTC will provide the leadership and oversight for the design and development of the LIS Awareness and Orientation Core Module.

2.8 Records Transition Education and Training

Task Manager: W. Spencer, SC-324A

This task involves the transfer of knowledge and guidance of records management techniques of manual to automated systems. Such areas of education include:

- Location and retrieval of records
- Retention and disposition of both manual and electronic records
- Security and access to new records systems

Training would emphasize:

- Familiarity with new policies and procedures (Target Group: Records Administrators; all users of BLM records affected by modernization efforts)
- Bureau Automated Records Inventory - Hands-on training (Target Group; Records Administrators; Records Managers)
- Use of future automated BLM Directives system and current subject code system for information/data/records retrieval. (Target Group; All affected users; Records Managers)

This task describes the tasks involved in developing, testing and evaluating a training plan in the pilot state. The plan will then become a template for use Bureauwide.

A. **Assumptions-**

- o New policies and procedures training should be incorporated into ongoing Bureau inreach training programs.
- o Separate stand-alone training will be needed for each type of training, and possibly for target group within each group.
- o The Bureau recognizes the legal, historical, and organizational value of its records and the benefits of planning for future needs.
- o Records Administration will be a major State office function.
- o Vendor-provided training will not be applicable or adequate; BLM will be required to develop records training to meet the needs of records transition.
- o Records Administrators will require training to provide oversight, support, and training within their states.
- o Skill development will be consistent with P&O Task 2.2.
- o Records transition guidance and policy will be developed in time to develop adequate training development and implementation to occur.

- o States will need to modify records transition courses to fit local records situations.

B. Policy Considerations-

- o Roles and responsibilities of the Records Administrators must be clearly defined.
- o The extent to which states may modify training packages will be dependent upon the policy requiring data and system standardization.
- o Training must be coordinated with WO-810.

2.9 Skill Acquisition and Development for Interim Release No. 1

Task Manager: B. Ader, SC-340

Take the actions necessary to ensure Nevada and New Mexico are prepared to perform the Beta tests, and Alaska is prepared to Alpha test and convert to production Interim Release No. 1. This Release is needed to provide a test of the software, to identify the amount of education and training required for managers, staff, and technical personnel to test organizational concepts, and to develop, use, and evaluate skill acquisition strategies and need identification techniques. In order to utilize data and information derived from Release No. 1, technical results must be analyzed by September 1990 and general results by March 1991.

A. Assumptions-

- o Schedule for Release No. 1 and Release No. 2 will be kept.
- o Content for Release No. 1 will remain unchanged.
- o Funding will be available.
- o Hardware/software capacity will be adequate and installation timely.
- o Release No. 1 will provide valuable information to assist in the effectiveness of Release No. 2 - the Operations concepts.
- o User interface will be menu driven and user friendly.
- o States will run dual--State Office, one DO plus attendant RAs with DPS-8. Data entry workload and perhaps adjudication workload will double for offices running dual.
- o Involvement will depend on existing delegations (there will be no changes in delegations for the test).
- o Data will reside on the SO computer.
- o Same people who do work now will do work on the test.

B. Policy Considerations-

- Increase in workload may require policy to acknowledge need to adjust workload to accommodate test.
- Need policy about nature of the test; e.g., scope and relationships of test to operational system, direction, exact Beta test locations, when Alaska will go to production, transition procedures, etc.
- Training and skill acquisition must be coordinated with WO-800.

2.10 Skill Acquisition and Development for Interim Release 2

Task Manager: B. Ader SC-340

Interim Release 2 will be the production release of interim for all states. The installation of the release will be staggered to allow the data loading, training, and operational concerns associated with the release to occur orderly and with proper support. Refer to Technology Task 7.2 for description of Release No. 2.

A. Assumptions-

- The Beta test of Interim Release 1 is successful and changes needed are able to be made to Interim Release 2.
- The Beta test and production installation of Release 1 occur as planned.
- State data is complete and ready to be uploaded.
- Skill acquisition must be consistent with P&O Task 2.2.
- Telecommunications and hardware will be adequate to support the Release.

B. Policy Considerations-

- The nature of Release 2 must be clearly defined including whether it will utilize integrated data.
- The extent of the dual run and work/functions required to install and operate the Interim Release must be defined.
- Skill acquisition must be coordinated with WO-800.

2.11 Organizational and Personnel Preparation for FFS

Task Manager: J. Yarborough, SC-610

This task will develop the organizational and skill acquisition guidance necessary to prepare Bureau offices for the installation and implementation of the Federal Financial System (FFS).

2.12 Security Awareness Training

Task Manager: J. Webber WO-770

One of the tasks that is required under the Computer Security Act of 1987 is to provide security awareness training to all managers, users, and technical personnel who use, operate, or manage a Federal computer. The objective is to increase staff awareness of the needs and techniques to protect the Bureau's assets from the types of threats that affect computer-based applications. Training should be provided on an ongoing basis.

A. **Assumptions-**

- Management is committed to provide the training at all levels of the organization.
- Funds will be available to provide the required training.

B. **Policy Considerations-**

- Instruction Memorandum No. 90-104, subject: Security Awareness Training, is being implemented throughout the Bureau.
- There must be a Bureau Security Policy.

Task Title: 2.1 Personnel/Organizational Documents Revision

Task Manager: Pat Harvey

Step Order	Action Steps	Responsible Official	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
2.1.1	Make Initial Assignment	FC and WO-800		May-89	Oct-89			Memo signed by WO-100	FC Minutes; Culp Hofman to initiate.
2.1.2	Establish Teams	Culp, Hofman		Jun-89	Oct-89		Memo	Memo signed by WO-100	Hofman to draft memo.
2.1.3	Develop Action Plan	Ron Hofman Classifier Staff Specs Management Analyst Management Research	VanZanden Team WO-830 Field Personnel Officers	Jun-89	Oct-89	IRM Organization Study Hofman Report Training Needs Analysis AMS Reports	Action Plan	Acceptance of plan by WO-800 and FC Rep.	Final Action Plan coincide with IRM Organization Study.
2.1.4	Complete Action Plan Steps	WO-840	Field Personnel Officers WO-830 Assistance from Personnel Bureauwide, OPM, and Dept. Personnel	Sep-89	Jun-90	BMT decisions on IRM Organization Study	Standard documents priority basis.	Acceptance by WO-830 and WO-800	

Task Title: 2.1 Personnel/Organizational Documents Revision

April, 1990

Task Manager: Pat Harvey

Step Order	Action Steps	Responsible Official	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
2.1.5	Prepare Guidance to Field for Implementation	WO-840	Team Leaders WO-840, WO/830	Nov-89	Jul-90	Completed Action Plan	Individual documents and guidance memos.	WO-800 signature on each transmittal memo.	
	Individual Documents Schedule: Managers Users Program Leaders Data Admin/Records Admin DSD Admin/IRM Chief LIS Coordinator Computer Operator/Assistant Data Base Administrator Communications Specialist Computer Programmer Analyst/Spec GIS Carto/Tech/ADP Aspects ALMRS Tech Aspects GCDB Review/Additional Doc.	WO-840/Pat Harvey WO-840 WO-840 WO-840 WO-840 WO-840 WO-840 WO-830/Hoffa WO-830 WO-830 WO-830 WO-830 WO-830 WO-830	Core Team and Bureau Participants Core Team, IRMAC and Bureau Participants	Oct-89 Nov-89 Dec-89 Jan-90 Jun-90 Jul-90 Jan-90 Jan-90 Feb-90 Feb-90 Mar-90 Mar-90 Apr-90 TBD TBD TBD	Dec-89 Dec-89 Jan-90 Feb-90 Jul-90 Aug-90 Feb-90 Feb-90 Mar-90 Mar-90 Apr-90 Apr-90 May-90	WO Div of Personnel approval/other clearances			
2.1.6	Prepare Implementation Schedules	Directors of all Bureau Offices	State and Office Directors and Managers	Jan-90	Oct-90		Individual office implementation schedules.	Signed by individual Office Managers.	Office plans prepared as guidance is received.
2.1.7	Implement Office Plans	Director of all Bureau Offices	State and Office Directors and Managers	Jan-90	Nov-90		Revised standard documents.	All standard documents are issued and in place.	

Task Title: 2.1 Personnel/Organizational Documents Revision

Task Manager: Pat Harvey

Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
2.1.8	Monitor/Evaluation	WO-800	WO-840, 830, 860, SO-DSDs Administration, etc.	Mar-90	Jan-91		Final evaluation reports from all major organization levels.	WO-800 approves reports from each major organization al level.	

Task Title: 2.2 Strategy for Automation Skill Acquisition and Development

Task Manager: Noel Granzow

Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
	A. Build Overall Integration Strategy					Coordination with NM Pilot and Task 5.1 is critical.			
2.2.1	Make Initial Assignment	WO-800			Oct-89		Hofman-Subcommittee Report	Signature WO-800	Follow-up to report recommendations.
2.2.2	Designate Integration Strategy Team Leads and Oversight Group	WO-800			Oct-89		Memorandum	Signature WO-800	Oversight group: Kirby, Granzow, Napoli, Hamilton, Womak
2.2.3	Determine Strategy for Site Inventory of Skills	Granzow	Existing Studies; SC-310,344; PTC; WO-810	Oct-89	Feb-90		Recommendation and Proposed Action Steps	Signature by SC-100	Coordinate with Other Site Surveys
2.2.4	Assemble and Analyze Skill Needs Data and Criteria to Meet Skill Needs Through Training Recruitment or Contracting and Produce Integrated Strategy Document. (See Task 2.9 for Rel. 1.)	Integration Team Leads: Singlaub, Van Manning, and Nichols	Training, Personnel, Contracting, and IRM Specialists as Appropriate; PTC, SC-310, SC-344, WO-810	Oct-89	Nov-90	IRM Organization Study, PTC Needs Assessment, AMS Report, Personnel Action Study, etc. O&P Task 2.1	Report categorizing work by function, position, location, evaluate by criteria and recommended strategy.	Sign off by oversight committee.	Synthesis of all workload studies.
2.2.5	Develop AWP Process for FY 1991 to Address Training, Recruitment, and Contracting Costs.	Integration Team Leads (Singlaub, Van Manning, and Nichols) and WO-800	Office Budget Officers; SC-310, 344; PTC WO-810	Feb-90	Sep-90		Specific guidance as FY 1990 and FY 1991 AWPs.	Signature on AWPs.	Begin FY 1990 rough, provide more complete guidance for FY 1991.

Task Title: 2.2 Strategy for Automation Skill Acquisition and Development

April, 1990

Task Manager: Noel Granzow

Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
	B. Training								See Task 2.9 for Activity relating to Interim Rel. 1.
2.2.6	Designate Training Team	John Singlaub	SC-310,344; PTC	Nov-89	Nov-89		Memorandum	Signed by Approving Official.	
2.2.7	Training Team Develops Action Plan	John Singlaub	SC Training Specialists, WO-810; SC-310,344; PTC	Nov-89	Jan-90	O&P Tasks 2.2.4, 2.2.5	Team Schedule	Approved by Oversight Group	Coordinate with Task 2.9
2.2.8	Training Team Completes Action Plan Tasks	John Singlaub	SC-310, 344	Jan-89	Jun-90	O&P Tasks 2.1, 2.2.4, 2.2.5 VanZanden Study, PTC Needs Assessment, AMS Report, Personnel Action Study, etc.	Completed Tasks	Review by PTC, Service Center, signature by WO-800.	
2.2.9	Prepare Guidance for Implementation	John Singlaub	PTC; WO-810; SC-310, 344	Jan-90	Jun-90	O&P Tasks 2.1, 2.2.4, 2.2.5	Individual Documents and Guidance Memos.	Acceptance by WO-800.	Prepare documents/guidance available for FY 1990 mid-year AWP and for 1991.
2.2.10	Prepare Office IRMP	All Office Managers		Jan-90	Sep-90		Individual Office Implementation Schedules signed by Office Managers.	Plans are prepared as guidance is received.	

Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
	C. Recruitment								Coordinate with Task 2.9
2.2.11	Designate Recruitment Team Members	Terry Nichols		Nov-89	Nov-89		Memo	Signed by Approving Official	
2.2.12	Recruitment Team Develops Action Plan Tasks	Terry Nichols	Personnel Specialists Team	Nov-89	Jan-90		Action Plan Document	Approved by Oversight Group	Coordinate with Training and Contracting Team.
2.2.13	Recruitment Team Completes Action Plan Tasks	Terry Nichols	Personnel Specialists, Team, SC-300	Jan-90	Jun-90	P&O Tasks 2.1, 2.2.4, 2.2.5	Recruitment strategies documents for positions, functions, and locations.	Approved by Oversight Group and WO-830.	
2.2.14	Prepare Guidance for Implementation	Terry Nichols	SC-300, Personnel Spec.	Jan-90	Jun-90	P&O Tasks 2.1, 2.2.4, 2.2.5	Individual Guidance Memos	Approved by WO-800	Guidance memos available for AWP FY 1990 through FY 1991.
2.2.15	Prepare Office IRMP	All Office Managers		Jan-90	Sep-90	Guidance Memos	Individual Office Implementation Schedules	Schedules signed by Office Managers	Schedules are prepared as guidance is received.

Task Title: 2.2 Strategy for Automation Skill Acquisition and Development

Task Manager: Noel Granzow

Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
	D. Contracting								
2.2.16	Designate Contracting Team Members	Van Manning		Nov-89	Nov-89		Memorandum	Signed by Approving Official	Coordinate with P&O Task 2.9
2.2.17	Contracting Team Develops Action Plan Tasks	Van Manning	Contracting Specialists, Personnel Spec., SC-300	Nov-89	Jan-90	P&O Tasks 2.1, 2.2.4, 2.2.5	Action Plan Document	Approved by Oversight Group	Coordinate with Training and Contracting Team
2.2.18	Contracting Team Completes Action Plan Tasks	Van Manning	Contracting Spec., Personnel Specialist, SC-300	Jan-90	Jun-90	P&O Tasks 2.1, 2.2.4, 2.2.5	Contract document prototypes for specific functions and locations.	Approved by Oversight Group	Guidance for contacting should proceed fairly rapidly to support interim.
2.2.19	Prepare Guidance for Office Implementation	Van Manning	SC-300	Jan-90	Jun-90		Individual Office Guidance Memos	Approved by WO-800.	Guidance for contracting should proceed fairly rapidly to support interim.
2.2.20	Prepare Office IRMP	All Office Managers		Jan-90	Jul-90		Individual Office Implementation Schedules	Signed by Office Managers	Office schedules are prepared as guidance is received.

Task Title: 2.3 Skills Acquisition for Target System April, 1990

Task Manager: Mike Kirby

Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
	Skills Acquisition Strategy Development								
2.3.1	Authorize Task	Moeller/FC	Kirby/Granzow		Completed	RFP Issued	Memo authorizing the task	Memo signed by WO-100	This task must be integrated with the strategy, data developed in O&P Task 2.2
2.3.2	Designate Skill Acquisition Team Lead (contract, recruit, train) and advisory groups	Kirby	Hofman, PTC, SC-300, WO-800, WO-700	Underway	June 1990		Memo designating team leads	Memo signed by WO-100	Skill Acq. Policy Advisory Group: Hofman, Womak, Napoli, Kirby, Granzow, Hamilton, Van Manning, Singlaub, Nichols
2.3.3	Review RFP, Available Data, Experience to Date, and Develop Integrated Approach to Task Completion	Kirby	SC-300, Field, Team Leads, Policy Advisory Group	Underway	2 Months after RFP Release	O&P Task 2.1, 2.2, 2.5, 2.12, RFP, Training Needs Analysis	Action Plan for coordination and approach	Plan approved by Policy Advisory Group	
2.3.4	Analyze and/or Develop Current Skills Needs Data	Kirby	SD Contractor, SC Ops. Advisory Group, Team Leads, SC-310	Underway	Award	O&P Task 2.1, 2.2, TSA Task 7.2, 15.4	TS skill needs report	Report approved by Policy Advisory Group	SD Contractors: ASEC, TGS, NSR Contractor-Integrator and/or SD subcontractor
2.3.5	Develop Automated Skills Data Base	Kirby	SD Contractor, SC-310, State Reps as needed, Team Leads	Underway	Award		Skills Data Base	Skills Data Base approved by Kirby/Granzow	Product continues in use throughout lifecycle

Task Title: 2.3 Skills Acquisition for Target System

Task Manager: Mike Kirby

Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
2.3.6	Perform Skills Inventory of Training, Recruitment, and Contract Hire by Skill and Geographic Location	Kirby	WO-810, PTC, SC-310, SC-310, Contractor, States, SD Policy Adv. Group, PTC, Team Leads, SD contractor	Award	Award +6 Mo	Skills Data Base, needs analysis, GFI, O&P Task 2.2	TS Skills Inventory Report	Approved by Adv. Group	
2.3.7	Perform Skill Needs Analysis	Kirby	TS Contractor, SC-310, SD Contractors, SD Advisory Groups, PTC, States, Team Leads	Award	CRD	TS Design, Skills inventory, GFI , O&P Task 2.2	TS Needs Analysis Report	Approved by Kirby/ Granzow	
2.3.8	Develop Criteria for use of training, recruitment & contract hire by skill and geographic location.	Kirby	WO-810, Team Leads, PTC, TS Contractor, Personnel lists, Pol. Adv. Group,Field Input	Under-way	Award	P&O Task 2.2, Skill needs analysis	Policy re criteria	approval by WO-800/700	
2.3.9	Develop integrated strategy to meet skill acquisition needs including training contracting for skills & recruitment.	Kirby	Team Leads, SC_300, Pol. Adv. Group, FC, WO, HRDC, Contractor	Under-way	Award	P&O Task 2.1, 2.2, Skill needs analysis, Bureau Policy, TSA Task 15.4	Strategy document	Approval by Policy Advisory Group	NOTE: Team Leads, Granzow, Kirby, should meet periodically through the period of strategy development to ensure good coordination

Task Title: 2.3 Skills Acquisition for Target System

April, 1990

Task Manager: Mike Kirby

Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
2.3.10	Develop funding strategy and preliminary cost estimates	Kirby	WO-704, Budget Analysts, contractor, PTC, WO-810, OPS Advisory Group, Team Leads	Under-way	Award	Integrated Strategy, Contractor Cost est., Est. from other sources	Funding Strategy and cost estimates	Strategy approved by Policy Advisory Group	
	Training								
2.3.11	Identify team members and Ops Advisory Group	Kirby	Granzow/Kirby, Hofman, PTC	Feb 90	By Award		Memo	Memo signed by WO-800	
2.3.12	Develop Skills Development Strategy	Kirby	Contractor, PTC, Ops and Policy Adv. Groups, SD Contractors, FC, HRDC, WO, Skills Acq., Team Leads, SC-310	Under-way	Award	Media Analysis, Delivery System Analysis, Risk Analysis, Cost Estimates, Funding strategy, Integ. Skill Acq. Strategy, System Acceptance Requirements	Skill Development Strategy	Approved by Policy and Ops Adv. Group	SD Contractors: ASEC, TGS, NSR Strategy should be coord. with other team leads Certification of Acceptance for Target System requires ability to operate the system

Task Title: 2.3 Skills Acquisition for Target System April, 1990

Task Manager: Mike Kirby

Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
2.3.13	Determine what source (TS contractor, BLM or other, or combination) is best for providing each type of training activity.	Kirby	PTC, WO-810, Field, TS contractor, SC-300, Ops Adv. Group	Award	On-going thru Con-tract	P&O Task 2.2, Integrated skills acq. strategy, skills needs analy.	memo identifying training & source surnamed by Task Managers	Approval by SC-100	These determinations will be made as needed, based on strategy, cost, resources, etc.
2.3.14	Prepare skills development portions of Target System RFP	Kirby	SC-310, Beierle, Skill Dev. Contractor, Granzow	Under-way	2/90	P&O Task 2.2, Target Skill acq. strategy, Skills needs analysis	Training section in the RFP	RFP released	Skill development contractors composed of ASEC, TGS, NSR
2.3.15	Answer Offerors' questions on skills development and prepare appropriate RFP amendments	Kirby	Beierle, Granzow, Contractor, SC-310	RFP Re-lease	Props due	RFP released	RFP Amendments	RFP Amend-ments Released	
2.3.16	Prepare for and conduct proposal evaluation (TPEC)	TPEC Members Responsible for training	SC-310, Beierle, Contractor, Granzow	RFP Re-lease	TPEC Done	RFP and Proposals	TPEC Recom-mendation	TPEC disbanded	Timeliness Assumed
2.3.17	Assist in preparation of skills development portion of the contract	Beierle	Granzow, Kirby	Under-way	Award		Contract	Contract Signed	
2.3.18	Provide oversight to all aspects of contractor skills development efforts	Kirby	SC-310, Granzow, Beierle, SD Contractors	Award	On-going thru Con-tract	P&O Task 2.2/Target skill development strategy, contract award, Tech Task 6.5	contract managed	Contract activity concluded	TS skill development strategy prepared (step 2.3.12)

Task Title: 2.3 Skills Acquisition for Target System

Task Manager: Mike Kirby

Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
2.3.19	Designate responsible person for preparing task orders, management, detailed cost estimate, quality control, product review of contracted activities	Kirby	SC-310, PTC, WO-810, Granzow, SD contractors	Award	On-going thru contract	P&O task 2.2, TS Skill Dev. Strategy, Action Step 2,3,12 and 13	Memo designating person and outlining responsibility	Memo signed by SC-100	
2.3.20	Designate Review Team for final products	Kirby	SC-310, PTC, WO-810, SD Ops Adv. Group	Award	Award +2 Mo.		Memo designating Review team members	Memo signed by SC-100	
2.3.21	Perform final product review	Review Team #1	WO-810, PTC, SC-310, Field	Award +2m	On-going in accord with contract requirements	Product delivery, QC criteria/standards	Acceptance of contractor product	Review team approval of deliverable	REVIEW MUST BE PERFORMED WITHIN 30 DAYS OF DELIVERY!
2.3.22	Prepare Training Plan and Schedule Contractor Developed Training	Kirby	TS contractor, SC-310, Ops Adv. Group	Award +2m	On-going thru Contract	TS delivery schedule BLM readiness training	memo to all offices with impl. plan and schedule	memo signed by SC-100	Must be coordinated with the non-contractor training schedule
2.3.23	Perform Training	Varies by course	team, TS contractor, PTC, WO-810, SC-310	Award +8m for pilot	On-going thru Contract		Courses given	Courses completed	

Task Title: 2.3 Skills Acquisition for Target System April, 1990

Task Manager: Mike Kirby

Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
2.3.24	Evaluate Training Effectiveness and Make Needed Changes	Kirby	PTC, Training team, participants, TS contractor, SC-310, Ops Adv. group	Award +8m for pilot	On-going thru Con-tract	Training performed and evaluation completed	Evaluation summary and rec-ommended changes	Approval by SC-100	
	Recruitment								
2.3.25	Prepare plan for identification and development of training other than contractor performed (schedules, topics, source, etc.)	Kirby	PTC, WO-810, SO Training Officers, Granzow/Kirby, SD contractors, Ops. Adv. Group	Award	Award +2m	Training needs analysis, other studies, P&O Task 2.2, TS skill dev. strategy	Strategy	Approval by WO-800	Coordination with contractor developed training and skills is critical
2.3.26	Prepare general guidance, standards for training development and designate final review team for all training products	Kirby	PTC, WO-810, SD Contractors, SC-310	Award	Award +3m	TS Skill development strategy, P&O Task 2.2	IM to course managers	Approval by SC-100	
2.3.27	Designate person responsible for preparing statement of work and performing QA/QC for each course	Kirby	PTC, WO-810, SC-310	Award	Award +3m		Memo designating course managers	Memo signed by SC-100	
2.3.28	Prepare/obtain skill development materials	varies	Varies	Award +4m	on-going thru contract life	Vary depending on topic	training/ education material prepared	Materials received by review group	

Task Title: 2.3 Skills Acquisition for Target System

April, 1990

Task Manager: Mike Kirby

Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
2.3.29	Perform Product Acceptance	Review Team #2 Lead	Course Manager, PTC, WO-810, Singlaub	Award +4m	On-going thru contract		Recommendation for approval, disapproval or changes	Decision signed by WO-800	
2.3.30	Prepare training plan and schedule integrating both contractor and non-contractor developed training	Kirby	PTC, WO-810, SC-630, SC-310	Award	Award +7m	TS schedule, contract developed training	Training Plan	Approved by SC-100	Integrate with Contractor developed training schedule
2.3.31	Perform Training	varies by course	varies	Award +8m (pilot)	On-going thru contract	Completed training materials	Courses given	Courses completed	
2.3.32	Evaluate training effectiveness and make needed changes	Kirby	participants, PTC, WO-810, SC-310	Award +9m	On-going		Evaluate summary and recommended changes	decision/memo by SC-100	May be combined with evaluation of contractor developed products, if practical
	Contracting for Skills								
2.3.33	Designate team members and Ops Advisory Group for recruitment	Kirby	Hofman, Herrington	Feb 90	June 90		Memo designating team members	Memo signed by WO-800	Recruitment Ops. Adv. Group
2.3.34	Prepare recruitment plan to include types of skills, numbers needed, types of locations and when needed.	Kirby	PTC, SC-600	Award	Award +3m	Skill Acq. Strategy (2.3.8)	Recruitment Plan	Plan Approval by SC-100	

Task Title: 2.3 Skills Acquisition for Target System

April, 1990

Task Manager: Mike Kirby

Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
2.3.35	Prepare Contracting Documents for Both Centralized and Field Use	SC-650	WO-830, WO-850, Team, Field		Award +6m		Completed contract documents	Receipt by team leader	
2.3.36	Prepare and Issue Guidance and Contracting Documents to the Field for Use	SC-650	WO-850		Award +6m		Memo transmitting guidance and documents	Signed by WO-800	
2.3.37	Prepare Implementation Schedule	WO/SC/SO/BIFC /Directors	Kirby, Granzow		Award +7m	TS Schedule	Schedule for adv. contracts	Signed by office director and rec'd by team	Must occur in 1m prior to Unix acceptance at pilot
2.3.38	Prepare and Issue Centralized Contracts per Time Schedule	SC-650	Field Input/Requests		Award +8m		Contracts adv.	Contracts awarded	
2.3.39	Prepare Status and Evaluation Reports	WO/SC/SO/BIFC Directors	Van Manning/team SC-650		Award +10m		Eval summary and recommendations prepared	Approved by SC-100	

Task Title: 2.5 Data Administration Training and Education

Task Manager: Janis VanWyhe, WO-704

Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
2.5.1	Obtain FC Approval of Concepts	VanWyhe, WO-704		7/15/89	7/15/89	Field Committee	Briefing Paper	FC Approval	Completed
2.5.2	Establish Team	VanWyhe, WO-704		8/30/89	8/30/89		Memo	Memo signed by WO-700	Completed
2.5.3	Develop Strategy for Training Data Administration	B.Moeller, AK-940	Tarshis, Frazier, Womak	9/1/89	2/16/90	P&O Task 2.2	Draft Strategy	Report Sent to WO-704	
2.5.4	Review/Approve Data Administration Training Strategy	VanWyhe, WO-704		2/16/90	3/15/90	P&O Task 2.2	Completed Training Strategy	Approved Training Strategy	Coordinate with WO-800 (training)
2.5.5	Promulgate DA Training Strategy	VanWyhe, WO-704	SODAs, ADDAs, Womak	3/1/90	On-going	P&O Task 2.2	Distributed Strategy	IM Transmitting Strategy, Report to Hofman, SDs, ADs	Provide training requirements for Bureau Baseline to O&P Task 2.2
2.5.6	Implement Training	VanWyhe, WO-704		3/1/90	On-going		Training Performed	Training to Course Completed	

TASK TITLE: 2.7 LIS Awareness and Orientation Core Module Development

April, 1990

TASK MANAGER: Jim Stone, PTC

Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
2.7.1	Make Initial Assignment	Dean Stepanek		10-4-89	10-4-89	LIS needs, Analysis Design Paper, P&O Task 2.2		Completed	
2.7.2	Select Team	J. Stone		3-1-90	3-1-90			Completed	
2.7.3	Core Module Development Team Meeting	J. Stone	WO-810	3-26-90	3-30-90	P&O Task 2.2	Course Outline	Completed	
2.7.4	Develop Lesson Plans	J. Stone	PTC Team	4-2-90	5-1-90		Draft Lesson Plan to PTC	Review by PTC	
2.7.5	Pilot Test Lesson	J. Stone	Team, San Juan RA, Durango	8-13-90	9-30-90	New Mexico video completed	Pilot test performed and evaluated	Final (modified) course approved by PTC Director	
2.7.6	Train the Trainer	J. Stone	PTC, WO-810	9-30-90	10-31-90	Module completed	Training presented	Training completed	
2.7.7	Presentations to the Field	SD's	Trainers, Field participants	11-1-90	9-30-91	Module approved by PTC	Module received by the field	Presentations completed	

TASK TITLE: 2.8 Records Transition Training and Education April, 1990

TASK MANAGER: Wendy Spencer

Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
2.8.1	Develop Plan for Rec Transition Training/Education	Spencer	NM-940, SC-324	Sep-90	Dec-90	P&O 3.6, 3.5, 3.4.3, 2.2, 2.3; Data 8.1.1 - 8.1.11; TSA 7,15	Plan	Appr by SC-300, WO-771	To be developed and tested in New Mexico
2.8.1.1	Develop Modules	Spencer	NM-940, SC-324	Apr-92	Jun-92	P&O 2.8.1	Modules	Appr by WO-771	
2.8.1.2	Conduct Training	Spencer	NM-940, SC-324	Jun-92	Sep-92	P&O 2.8.1.1	Evaluations	Recd by WO-771	
2.8.1.3	Evaluate Training	Cummins	SC-324	Sep-92	Dec-92	P&O 2.8.1.2	Report	Recd by SC-300	
2.8.1.4	Dev Training Templates	Spencer	SC-324	Dec-92	Apr-92	P&O 2.8.1.3	Modules	Appr by WO-771	
2.8.2	Dev Record Inv. Training for R.A.	Martin	SC-324, NV-950	Oct-92	Dec-92	Data 8.2.8	Evaluation	Recd by WO-700	
2.8.3	Dev Paperwork Mgt. Training Plan	Martin	SC-324, WO-855	Feb-93	Oct-93	Data 8.3.3; TSA 7,15	Plan	Appr by WO-771	

Task Title: 2.9 Skill Acquisition and Development for Interim Release 1 April, 1990

Task Manager: Bob Ader

Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
2.9.1	Issue Clarifying Guidance and Direction for Authors About How to Get People and Organization Ready for Interim Release 1.0	Mike Kirby/Bob Ader	WO Lands, WO Minerals, Hofman, Herrington, Horton (NM) Wolverton (AK) (NV)	Oct-89	Dec-89		Memorandum to AK, NV With This Action Plan Attached	Signed by SC-100	Needs Immediate Attention. Needs WO Involvement ASAP. Attach Action Plan and Require Accountability.
2.9.2	Analyze NM, NV, AK Organizations in Terms of the IRM Organization Study Decisions and Make Proposals for Change	SDs, NM, NV, AK	Hofman, WO-840	Nov-89	Jan-90	IRM Organization Study Decisions P&O Task 2.2; Tech 6.1, 6.5, 7.1	Organization Proposal to WO-840	Approval by WO-800	
2.9.3	Make Appropriate Organizational Changes	SDs, NM, NV, AK		Nov-89	Mar-90	WO-800 Approval	Organization Change Request	PAY/PERS Changes Completed	
2.9.4	Analyze Staffing and Skill Needs and Impacts Due to Installation and Implementation of Interim Release 1 to Alaska	B.Ader, M.Kirby AK	Joe Strong, LIS Coordinator, Ron Hofman, Noel Granzow	Jan-90	Feb-90	IRM Organizational Study, SC and WO GMEs, P&O Task 2.2; Tech 6.1, 6.5, 7.1	Analysis	Approved by State Directors	
2.9.5	Prepare User Guides	SC-Carl Zulick	2 Doc. Spec (TGS) 2 Users (SC/AK) 2 Sys. Analysts (PT)	Nov-89	May-90	Coding and System Analyst Input	User Manual Systems Manual	Users Review	
2.9.6	Prepare User Guides Subsystem 5-9	AK-Merrie Frazier, AK-941 AK-944	2 Doc/Trng Specialists 2 Users 2 Sys. Analysts	Jan-90	May-90	Coding and Analysts Input	Users Manual Systems Manual	Users Review	See if Included in 6 from Shari

Task Title: 2.9 Skill Acquisition and Development for Interim Release 1 April, 1990

Task Manager: Bob Ader

Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
2.9.7	Prepare Integrated Plan to Acquire Needed Skills by Contracting, Training and Recruitment	M.Kirby AK	Bob Ader LIS Coordinator AK, Personnel, Contracting	Jan-90	Mar-90	P&O Task 2.2	Completed Plans	Approval by State Directors	
2.9.8	Analyze General Training and Briefing Needs	M.Kirby/B.Ader	Training Staff LIS Coordinators	Jan-90	Mar-90			Signature by Director	
2.9.9	Develop Training Materials	SC-344 Carl Zulick	2 Soc/Trng Spec (TGS) 2 Users (SC/AK) 2 Sys. Analysts (PT)	Dec-89	May-90	Completion of Code	Training Manuals and Materials	Approved Training	
2.9.10	Develop Training Test Materials Subsystem 5-9	AK-Merrie Frazier Carl Zulick	2 Doc/Trng Specialists 2 Users 2 Sys. Analysts	Dec-89	May-90	Completion of Code	Training Manuals and Materials	Approved Training	
2.9.11	-Develop Training Courses -Query-Data Entry Training for Program Leads and Users -Adjudication Training for Adjudicators -Technical Training for Tech People -Other	Bob Ader	PTC, M.Kirby, State LIS Coordinators, Vendors	Jan-90	May-90	P&O Task 2.2, 2.5, 2.8, 4.2	Guidance Memos	Signature by Director	
2.9.12	Train AK Personnel	SC-344 AK-943	2 User/Train (SC) 2 User/Train (AK)	Jun-90	Jun-90	Installation and Readiness Test	Trained AK Staff	Management Approval in AK	

Task Manager: Bob Ader

Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
2.9.13	Training and Setup for AK O&M	AKSO	2 Sys. Analysts (SC) 2 Sys. Analysts (AK) 2 User/Train (AK)	Aug-90	Aug-90	User Acceptance Test	Operational System	AK Management Approval	
2.9.14	Training NV/NM	NVSO NMSO	2 User Train (SC) 2 User Trainers (NV/NM)	Jun-90	Jun-90	Installation	Trained Staff		
2.9.15	Conduct Briefings	Bob Ader	Same as Prepare Briefings	Feb-90	Apr-90	Completed Briefing Packages	Briefings	Briefings Completed	Need to Identify Team in Each State to Conduct Briefings. Participants May Want to Test Run.
2.9.16	Monitor, Evaluate, and Adjust Skill Acquisition Strategy for Use in Other States	Mike Kirby	WO-810, LIS Coordinators Personnel Contracting Personnel	May-90	Dec-90	Completed Test	Analysis of Strategy and Proposals for Change	Approval of Analysis by LIS Coordinators in AK, NV, NM	
2.9.17	Provide Feedback to Interim Skills Acquisition Task Managers	Kirby/Ader	LIS Coordinators	Aug-90	Sep-90 Feb-91 for General Concerns	P&O Task 2.2	Analysis	Receipt of Analysis by Interim and Target Task Leads	

3 Cultural Transition

The concept of cultural transition includes the management of change as it effects the attitudes and cultural environment of the Bureau. The term User Acceptance is broadly defined to include consideration of the effects of automation on both individual and cultural environments. Identification of the effects is only part of the work, modification of the environments to include automation as an acceptable or desired cultural value is necessary.

Automation is a major change in the Bureau and is having significant impacts on the Bureau culture. User acceptance has been identified as low, giving a strong indication that there are issues and concerns that need to be dealt with prior to the installation/implementation of major automation initiatives. These issues and concerns appear to reside in two major areas: impacts directly on individuals and impacts on the culture of the Bureau.

Further study is essential to identify the causes of low user acceptance attitudes and to design appropriate responses and remedies.

Potentially, impacts that directly affect individuals may include concerns about their job and interpersonal/job relationships--how will their current job change; how will their chances of getting other jobs be impacted; what new skills will they have to learn; how will it impact their opportunity to do "on-the-ground" work; how relationships with supervisors and peers will be affected (will there be changes in authority, power, ranking, or privileges currently in place); and how will new skill requirements affect their standing with peers.

Impacts on the Bureau culture are less visible, but may be more dramatic. Where automation comes in conflict with Bureau culture, it will affect the ability to implement automation initiatives. Where public has accepted the Bureau culture, their acceptance of automation may also be affected. Potentially, impacts on Bureau culture may include a wide variety of issues including conflicts between automation and traditional Bureau ethics of decentralization, program and office autonomy, emphasis on resource management and on-the-ground work, and informal communications. Additionally, public expectations of how the Bureau will respond to their needs may come in conflict with new response methods and procedures in an automated environment. Users also perceive that automation is driven from the top without true consideration for end user needs or mission accomplishment.

Communications with employees will play a large part in effecting cultural change and user acceptance. Both inreach and outreach efforts are essential. We must provide all users of automation with accurate and clear information about how automation changes will effect them.

3.1 Increasing User Understanding

Task Manager: Bill Pulford, Craig D.O.

Both the scope and the importance of the impacts of automation on cultural and individual values needs to be determined and appropriate actions taken to ensure acceptance of automation will facilitate, not inhibit, the installation and implementation of new automation initiatives.

A. Assumptions-

- o User understanding depends in part, on an understanding of the process, some involvement in the development of the product, and in seeing beneficial results

- Good communications are essential to ensuring an understanding of a dynamic and rapidly evolving projects like automation initiatives.

- Conflicts between the Bureau cultural and individual values and an automated environment need to be resolved in order to most effectively and efficiently install and implement major automation initiatives.

B. Policy Considerations-

3.2 Outreach

Task Manager: Leslie Cone, WO-704

The BLM has developed an Outreach Strategy to describe the BLM's automation objectives, plans, and schedules for implementation. The Outreach Strategy includes the identification of other federal agencies, local and state governments, professional associations and organizations, and key groups and individuals that are: (1) interested in BLM's data; (2) interested in data exchange and sharing; and (3) expect improved access to BLM managed data. The BLM's Outreach Strategy includes an emphasis on involving BLM Managers in future contacts with specialized groups, professional associations and Congress. These contracts will use a variety of BLM communication tools including brochures, videos and other briefing documents. A major segment of the Outreach Strategy is focused on improving the facilitation of reaching and attaining agreements with other federal agencies for the purpose of exchanging and sharing data. This will involve a team approach with the BLM WO Data Administrator to prepare a plan for the adoption of BLM's land and mineral records and Geographic Coordinate Data Base (GCDB) as Federal Information Publicatio Standards (FIPS), through the Federal Interagency Coordination Committee on Digital Cartography (FICCDC).

The Outreach Strategy will interact with the BLM's Inreach Strategy to ensure that there will be a basic understanding and communications of BLM's automation goals, objectives, plans and schedules for BLM's WO, SC and Field Office personnel. The interaction of the Outreach and Inreach Strategy will ensure a holistic and comprehensive training plan for BLM's personnel.

A. Assumptions-

- Oversight groups including the Department of the Interior, GSA, OMB and Congress need to understand BLM multiple-use mission and how automation is used to meet BLM management goals and objectives.

- Individuals, special interest groups, professional organizations, local and State governments, other federal agencies and the private sector are interested in exchanging, sharing and using BLM data.

- Automation will change the way BLM provides service to the public.

- Automation will change the way the public understands and perceives BLM.

- There is an increasing interest and awareness of the value of BLM's records and Public Land Survey Systems/Geographic Coordinate Data Base.

- There is a link between Outreach and Inreach planning and training.

B. Policy Considerations-

- o BLM's Headquarters Management Team and State Directors will guide outreach.
- o Congressional Outreach will be guided by Congressional Affairs.
- o Communications with Congressional Appropriation Committee personnel will be led by the BLM Budget Officer.
- o WO and SO Public Affairs Offices have primary contact management responsibilities.
- o BLM Managers have primary content and message development responsibilities.
- o BLM's Outreach Strategy will provide support to the BLM WO Data Administration for the establishment of data and records sharing and exchange policies.
- o Acquisition related information must be cleared through WO-850 or SC-652B.

3.3 Inreach

Task Manager: Mike Kirby SC-310

There is a need to develop an understanding of BLM's automation objectives and the benefits of modernization and LIS implementation within the Bureau. The concepts that need to be portrayed include:

a. BLM employees are the customers of the systems being developed and implemented.

b. BLM employees have played a significant role in defining user requirements.

c. The way employees do their jobs will change as new automated tools are provided.

d. The basic jobs in the Bureau will remain the same, only some of the tools to do those jobs will change.

e. Increased efficiency will result from the implementation of new automated tools.

f. Relationships with the public will change as a result of their being able to have more access to more information.

The LIS/Modernization effort needs an active inreach program for many reasons including:

a. People not directly involved with the project want a clearer picture of what to expect in both near-term and long-term.

b. Honest, open communication is a vital component in the success of automation implementation, and should be a part of the day-to-day business.

c. Managers and employees must have accurate, current information to develop an attitude of sponsorship/leadership/support for automation/Modernization.

d. Inreach efforts to date have fallen short of meeting the needs of the Bureau.

Specific items need to be considered in the inreach effort including: telephone support; electronic mail and bulletin boards; reference libraries; publications, news letters, and news releases; videos and other visual media.

A. Assumptions-

- Adequate funding will be provided for the inreach effort.
- Coordination of activities will occur between SC-311, SC-320, and WO-704.

B. Policy Considerations-

- Guidance will be provided by WO-700 and the Field Committee.
- SC-311 will work directly with the WO and SO public affairs staffs in the inreach effort.
- Acquisition sensitive matters must be cleared through WO-850 or SC-652B.

3.4 Public Room Transition

Task Manager: W. Spencer, SC-324A

Implementation of the Target System will significantly alter the method by which public inquiries and information is handled in field office Public Rooms. Redesign of physical space will be necessary to accommodate electronic media and resultant inquiries. In addition, the Bureau must consider which manual and automated records will be included in the public rooms.

This task involves the evaluation of both the records to be used in the automated public room as well as the physical design.

A. Assumptions-

- Results tested in New Mexico as the pilot state will generally be applicable Bureauwide.
- Public room redesign will be necessary at State, District, and Area Office levels to accommodate the differences in public use and interest.
- The public will be required to use automation for access to many records.
- Existing public room design and methods will generally not be adequate to provide target system implementation benefits to the public.
- Public rooms will take on additional responsibilities due to target system implementation.

B. Policy Considerations-

- The public room does not have a related WO program office providing policy, guidance, and oversight. The delegation of authority to a single Headquarters Office would permit more uniform direction to states on public room activities.

3.5 Public Room Information and Education Outreach for Interim

Task Manager: Bob Leopold, SC-320

This task will develop the strategy to ensure public users of the Interim LIS are effectively served and have adequate knowledge and understanding of the new information capabilities of Interim. The focus of the strategy will be to assist the public to effectively utilize the capabilities of Interim, thereby increasing public general readiness for and understanding of the potential capabilities of the Target System.

The scope of this task involves planning data access, public information, communications by public affairs, and aspects of public training. Interim hardware, software, facilities, and user support are covered in Technology 7.0. The public will receive excerpts of training modules prepared by the SC-340 for BLM users. These modules will be limited to retrieval and report generation only. The Service Center will develop guidance and procedures with assistance by States. States will then develop local implementation plans and tailor the guidance for local use.

A. Assumptions-

- Needed telecommunications will be available.
- Funding will allow for replacement of equipment in our public rooms.
- Off-site public users will be responsible for any ADP/telecommunications necessary to obtain BLM information.
- The public will be given only access and retrieval privileges with strict limitations on ad hoc query capabilities.

B. Policy Considerations-

- Data access and exchange policies must be clearly defined. This includes a reexamination of the fee structure for copies, general research, and data. Additionally, records sensitivity must be defined for all records used by the public.
- A clear definition of the legal acceptability of electronically produced data is critical to the successful implementation of the Target System public room. This includes the right of the public to see or obtain original or certified copies of documents and records.
- The Public Room needs an advocate in the Washington Office to provide policy guidance and program leadership to the Public Rooms throughout the Bureau.

3.6 Public Room Information and Education Outreach for Target System

Task Manager: Bob Leopold, SC-320

This task will develop the strategy to ensure public users of the Target System LIS are effectively served and have adequate knowledge and understanding of the new information capabilities to Target. This task will provide the framework for specific education and outreach efforts necessary to facilitate the public to transition from Interim to Target System. Specific information and records tasks will be designed as each Target System phase is clarified and necessary training/education requirements can be identified.

A. Assumptions-

- o Needed telecommunications will be made available.
- o Funding will allow for the replacement of equipment in our public rooms.
- o The public will be given only access and retrieval privileges with strict limitations on ad hoc query capabilities.
- o States will be responsible for the implementation of public outreach for the Target System.

B. Policy Considerations-

- o Data access and exchange policies must be clearly defined. This includes a reexamination of the fee structure for copies, general research, and data. Additionally, records sensitivity must be defined for all records used by the public.
- o A clear definition of the legal acceptability of electronically produced data is critical to the successful implementation of the Target System public room. This includes the right of the public to see or obtain original or certified copies of documents and records.
- o The Public Room needs an advocate in the Washington Office to provide policy guidance and program leadership to the Public Rooms throughout the Bureau.

3.7 Inreach-Outreach Integration Strategy

Task Manager: Moeller, WO-700

The BLM will integrate its Inreach and Outreach Strategies to describe how outreach will provide the overall vision, guidance and basic communication support tools (brochures, videos, supercard) for inreach training and BLM employee general awareness. This will include developing guidance to be used in the Outreach Strategy Plan and the Inreach Strategy Plan. The guidance will be used to ensure that the BLM's automation objectives are correctly presented in the outreach communications and in the inreach presentations (including PTC developed and applied training).

A. Assumptions-

- Inreach and outreach strategies have a common message to deliver about BLM's automation goals and objectives.
- Inreach Strategy provides BLM managers and employees sources of documents for use in understanding the many activities taking place and to support on the job work functions.

B. Policy Considerations-

- BLM Headquarters Management Team, State Directors and the BLM Service Center Director will guide inreach and outreach integration.
- BLM Public Affairs Offices at the WO and SO levels provide support for the communication of a common BLM automation message including dissemination of brochures, viewing of videow and supercards.

Task Title: 3.1 User Understanding

Task Manager: Bill Pulford, Craig D.O.

Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
3.1.1	Task authorized	Field Committee			Completed		Field Committee Minutes	FC minutes approved	
3.1.2	Team Leader and Oversight Group Designated	Hofman/FC	Field Committee		Completed	Field Committee Authorization	Memorandum designating Team Leader	Memorandum signed by WO-800 dated 10/10/89	Oversight Group
3.1.3	Team Members Designated	Pulford	Hofman		Completed		Memorandum designating Team Members	Memorandum signed by WO-800	
3.1.4	Issues Scoped and Researched Tested	Pulford	Team, Field, OD Spec., WO-807, SC-300, PTC	Nov-89	Completed	Training needs analysis	Team consensus on issues	Team agreement	
3.1.5	Action Plan and Recommendations Developed	Pulford	Team, Field	Jan-90	Completed		Proposed Plan and Recommendations	Team agreement	
3.1.6	Oversight Committee Review of Plan and Recommendations	Hofman	Oversight group, Team	Feb-90	Feb-90	Plan and Recommendation Completed	Review completed	Plan and recommendations approved by Oversight Group	

Task Title: 3.1 User Understanding

Task Manager: Bill Pulford, Craig D.O.

Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
3.1.7	Brief Field Committee	Pulford	Team, Oversight group	Feb-90	Feb-90	Oversight Group endorsement	Briefing completed	Field Committee endorsement	
3.1.8	Obtain Decisions	Pulford	Team, Oversight group	Mar-90	Mar-90	FC endorsement	Decision document	Decision Document signed by WO-100	
3.1.9	Prepare Guidance to the Field and Other Bureau Offices on Implementing the Decisions	Pulford	WO-700, WO-800	Mar-90	Apr-90	Signed Decisions document	Memorandum	Memorandum signed by WO-700	
3.1.10	Offices Implement Guidance	Office Managers	OD Specialists and Management Analysis	Apr-90	Apr-91		Summary report of actions/ results from each office	Summary report approved by Office Head	

TASK TITLE: 3.2 Outreach

April, 1989

TASK MANAGER: Leslie Cone, WO-704

Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
3.2.1	Authorize Task	Sonneburg	SO PA Offices, SC-300		Completed		Assignment of task to WO-704, Leslie	Assignment formalized	Outreach and Inreach efforts must be closely coordinated to ensure consistent message.
3.2.2	Prepare Outreach Strategy	Leslie Cone	WO-700, SC-310, SC-140		Completed	P&O Tasks 3.3, 3.5, 3.6, 3.7	Outreach Strategy Plan prepared	Strategy approved by WO-700	
3.2.3	Provide Briefings for Congressional Awareness	Leslie Cone	SC-300, WO Cong'l Affairs, HMT, SD guidance and contacts, SO PA Chiefs	Oct-89	On-going	P&O Task 3.7	Briefings prepared and approved by WO-100	Briefings to indiv. cong'l staffs in WO and States performed	
3.2.4	Provide Management Direction	Dean Stepanek	Leslie Cone	Apr-90	On-going		Outreach Strategy Revised	Strategy Approved by WO-100	
3.2.5	Prepare ESO Demo Project	ESO Director	ESO	Feb-90	Jun-90		Demonstration completed	Demonstration performed	
3.2.6	Provide Automation Updates/Information for BLM Conferences	Leslie Cone	Field/WO Personnel	Jun-89	On-going	Conference/mtg agendas and schedules	Briefings/messages for delivery at meetings	Briefings/ messages delivered	
3.2.7	Distribute PL100.409 and Managing Our Land and Information Resources Study	Leslie Cone		Jun-89	Dec-90	BMT decisions on IRM Study	Documents	Documents distributed	
3.2.8	Contact Key Interest Groups	Leslie Cone	Bureau PA Chiefs, WO Cong'l Affairs, WO, DADs	Mar-90	On-going	RFP issued, WO-200/ 560 guidance	Groups contacted	Briefings delivered	

TASK TITLE: 3.2 Outreach

April, 1989

TASK MANAGER: Leslie Cone, WO-704

Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
3.2.9	Prepare Quarterly Newsletter	Leslie Cone	Bureau PA Chiefs, SC-310, 320	Jul-90	On-going	DOI Approval	Newsletter prepared	Newsletter issued/distributed	
3.2.10	Prepare Presentation Materials on ALMRS, Modernization, including Video, Exhibits, Computer Presentation	Leslie Cone	WO-700, SC-140	Jan-90	Mar-90		Presentation materials prepared	Presentation materials approved by WO-100	
3.2.11	Prepare Academic Outreach Plan	Leslie Cone	WO-700	TBD	TBD		Plan	Plan approved by WO-100	
3.2.12	Provide Support to BLM PTC for LIS Core Module Development	Leslie Cone	WO-704, SC-310, PTC	Mar-90	Apr-90	P&O Task 3.7	LIS Core Module	Presentation of training	
3.2.13	Provide Support to BLM WO Data Administrator for L&M Records and GCDB FIPS PUB Plan	Leslie Cone	WO-704, WO-771	Jul-90	Mar-90	WO HMT Decision to accept FIPS PUB Plan	FIPS PUB Plan and Schedule for completion	1994 FIPS PUB	This is a two to three year intensive effort.

Task Title: 3.4 Public Room Transition

Task Manager: W. Spencer SC-324

Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
3.4.1	Authorize Task, Identify Task Manager and Advisory Group	Leopold	WO-700, SC-100, FC	May-90	Jun-90		IM designating Task Manager and Adv. Group	IM signed by WO-700	Adv. Group=Leopold...
3.4.2	Inventory Current Public Rooms Type of Equipment Space Furniture	Spencer	SO Public Rooms, SC-344, SC-615c	Mar-90	May-90				Team: Spencer, Warren, AK, others TBD
3.4.3	Analyze Interim Impacts on Public Rooms (Physical Site) Location/Access to manual records Location/Access to auto. records Equipment needs Space needs Site modifications	Spencer	SC-344, Adv. Group, Alaska	Mar-90	May-90	Tech Tasks 7.1.8, 7.2.12, P&O Task 3.5.1; TSA Task 6.0	Report	Report approved by SC-300	
3.4.4	Develop Public Room Design Plan for Interim	Spencer	SC-344, Adv. Group, Alaska, SC-615c, SC-311, CO-950	May-90	Jun-90	Tech Tasks 7.2.15; TSA Task 6.0	Design for state public rooms	Design/plan approved by Adv. Group and SC-300	

Task Title: 3.4 Public Room Transition

Task Manager: W. Spencer SC-324

Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
3.4.5	Test Interim Public Room Design in Alaska	Alaska	Spencer, SC-344, SC-130	Jun-90	Dec-90	Tech Tasks 1.7.17c	Design tailored to Alaska	Design implemented	
3.4.6	Evaluate Test	Leopold	Spencer, SC-344, Alaska, Adv. Group, SC-130	Mar-91	Mar-91	P&O 3.4.5	Eval Report and Recommendations	Recommendations approved by SC-300	
3.4.7	Issue Guidance to States for Release 2 and Request Implementation Plans	Spencer	SC-344	Mar-91	Apr-91	Tech Tasks 7.2.15	IM with guidance	IM signed by WO-700	
3.4.8	Analyze Target System Impacts on the Public Room	Spencer	Adv. Group, SC-311, SC-320, NM	Award	Award+ 4m	TSA Task 7.1, award Task Orders, P&O Tasks 3.5, 3.6.5	Analysis	Analysis approved by SC-100	May be desirable to restructure the Adv. Group for the Target System component of this task
3.4.9	Develop Public Room Design Plan for Target	Spencer	Adv. Group, SC-310, SC-320, NM	Award +4	Award +6	TSA Task 7.1.3, 7.4.3	Completed plan	1-FC briefing, 2-approv by WO-700	
3.4.10	Test Target Public Room Design at Pilot	New Mexico	Spencer, SC-310	Award +6	Award +10		Test tailored for pilot	Design implemented	
3.4.11	Evaluate Test	Leopold	Spencer, SC-310	Award +9	Award +11		Evaluation report and recommendations	Recommendations approved by WO-700	
3.4.12	Issue Guidance and Request Implementation Plans from States	Spencer	SC-310, 320	Award +12	Award +12	TSA Task 7.1.3	IM with guidance prepared	IM signed by WO-700 or 100	

Task Title: 3.5 Public Room Information and Education Outreach for Interim April, 1990

Task Manager: W. Spencer SC-324

Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
	A. Interim 1 - Alaska								
3.5.1	Develop Action Plan for Interim 1, Incl Prepared Design and Public Needs Analysis	AK-943	AK Public Affairs Spec., AK Doc Spec.	Jan 90	Oct 90		Action Plan	Approval by SC-344, SC-324	
3.5.1.1	Customize Public User Documentation Using SC-Developed Guidance	AK-943	AK Public Affairs Spec.	Jan 90	Oct 90	Tech. 7.1.7	Public Users Manual	Approval by SC-344, SC-324	
3.5.1.2	Transmit Public User Notice	AK-943	AK Public Affairs Spec.	Jan 90	Oct 90	Data 1.4.1.3	Letter	Signed by SD-AK, reviewed by SC-324	
3.5.1.3	Customize Public User Training Materials from SC-Prepared Guidance	AK-M.Frazier	AK Public Affairs Spec.	Jan 90	Oct 90	Tech. 7.1.11	Training Manual Material	Approved by SC-344	
3.5.1.4	Replace Public Room Equipment	Terry B		Jun 90	Aug 90		Report on equipment/ software functions	Received by SC-344	
3.5.1.5	Provide Train the Trainer Course	C. Zulick	AK Trainer	Jul 90	Dec 90	Tech 7.1.17.a	Evaluation of course and tutorial documentation	Received by SC-344	NOTE: Due to geographical distances, new training and support will occur over telephone
3.5.1.6	Train Public Users	AK-M.Frazier	2-AK Trainers, 1-User Support, All	Dec 90	May 91	Tech 7.1.17; P&O 3.5	Evaluation on tutorials and overall experience	Received by SC-344	
	B. Interim 2 - New Mexico								
3.5.2	Authorize Task and Designate Task Manager and Advisory Group	Leopold	WO-704, SC-100, FC, SC-100	Mar 90	Apr 90	P&O Task 3.2, 3.7	Instruction Memorandum	IM signed by WO-700	

Task Title: 3.5 Public Room Information and Education Outreach for Interim

Task Manager: W. Spencer SC-324

Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
3.5.2.1	Identify Team Members	Spencer	Leopold, WO-704, WO-130	Mar 90	Apr 90		Instruction Memorandum	IM signed by WO-700	
3.5.2.2	Identify Public Room Users and User Needs (User Profiles)	Spencer	Adv. Group, Ader, SC-130, SC-344, SC-311, NM	Mar 90	Apr 90		Analysis	Analysis completed and accepted by SC-344	
3.5.2.3	Analyze User Needs and Ensure Functional and Data Requirements Address User Needs	Ader	SC-344, SC-320, Adv. Group, NM, AK, SC-311, SC-130	Jun 90	Oct 90		Analysis	Analysis completed and accepted by Leopold	
3.5.2.4	Identify How Interim Will Change the Way the Public Users Obtain Information and How the Public Room will Operate	Spencer	SC-344, Adv. Group, AK, SC-311, SC-130, NM	Apr 90	May 90	Tech. 7.2.4	Analysis of changes	Analysis approved by SC-344	
3.5.2.5	Prepare a Plan to Inform/Educate Users on Changes to Information Access in the Public Room and Related Areas due to Interim	Spencer	SC-344, AK, Adv. Group, SC-140, NM	Apr 90	Jun 90	P&O Tasks 3.2.2, 2.9.7, 2.10; Tech 7.2.12; Data 8.1.12, 1.4.2.3	Action Plan	Plan approved by SC-100, Adv. Group	
3.5.2.6	Complete Action Plan Steps and Preparation of Needed Materials Including Computer Assisted Help Documentation, Training User Guides, etc.	C.Zulick, Frazier	SC-344, AK, Adv. Group, SC-140, NM	Dec 90	May 91	P&O Tasks 3.2.2, 5.1, 2.9.7, 2.10; Tech 7.2.13	Materials prepared	Materials approved by SC-340	
3.5.2.7	Develop Evaluation Criteria for Information and Educational Materials	Spencer	SC-344, AK, Adv. Group, SC-140, SC-311	Jan 91	Jan 91	P&O Task 3.2.2	Criteria	Criteria approved by SC-300	
3.5.2.8	Test the Information and Education in New Mexico	Spencer	SC-344, NM Public	Feb 91	Mar 91	P&O 3.5.2.6; Tech 7.2.14	Info/educ materials impl plan to AK	Plan and materials administered by AK	

Task Title: 3.5 Public Room Information and Education Outreach for Interim

April, 1990

Task Manager: W. Spencer SC-324

Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
3.5.2.9	Evaluate Test Against Criteria	Spencer	NM, Spencer, SC-344	Mar 91	Mar 91	P&O 3.5.2	Evaluation summary and recom-mendations	Decision on recom-mendations by SC-300	
3.5.2.10	Revise or Supplement Materials as Needed	Zulick, Frazier	SC-140, SC-344	Mar 91	Apr 91	P&O 3.5.2	Revised info/educ materials	Revisions approved by SC-344	
	C. Interim 2 - Implementation								
3.5.3.1	Prepare Guidance and Materials for All States on Education/Assistance to the Public for Interim Rel 2	Spencer	SC-140, SC-344	Apr 91	May 91	P&O 3.5.2	IM giving guidance and transmitting info/educ materials	IM signed by WO-700	
3.5.3.2	Require States to Prepare a Public Room Action Plan Including Physical Design, Training, etc.	Spencer	SC-344, SC-311	May 91	Jun 91	P&O 3.5.2, 3.2.2	IM requires plan	Receipt and approval of plans by SC-324	
3.5.3.3	Train the Trainer	Zulick	3 Trainers	Feb 91	May 91		Course evaluation	Receipt by SC-344	
3.5.3.4	Notice to Users	All SOs	Public Affairs Spec	Jan 91	Mar 91	P&O 3.5.3	Letter	Approved by SC-324	
3.5.3.5	Customize Public Training/Documentation	All SOs	SO Public Affairs/ Docs Spec.	Jan 91	May 91	P&O 3.5.2	Public users manual	Approved by SC-344	
3.5.2.6	Train Public Users	All SOs	SO Public Affairs/ Docs Spec.	May 91	Dec 91	Tech 7.1.3, 7.2.15, 7.2.12; P&O Task 3.2.2	Course evaluation	Received by SC-344	

Task Title: 3.6 Public Room Information and Education Outreach for Target System

Task Manager: W. Spencer SC-324

Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
3.6.1	Authorize Task and Designate Task Manager and Advisory Group	Leopold	WO-704, SC-100, FC, SC-130	Oct-90	Oct-90	P&O 3.2.2	Instruction Memorandum	IM signed by WO-700	
3.6.2	Identify Team Members	Spencer	Leopold, WO-704, WO-130, SC-310	Oct 90	Oct 90		Instruction Memorandum	IM signed by WO-700	
3.6.3	Identify Public Room Users and User Needs	Spencer	Adv. Group, SC-130, SC-311	Nov 90	Dec 90	P&O Task 3.5 Use info in P&O Task 3.5.2	Analysis	Analysis completed and accepted by SC-300	
3.6.4	Analyze User Needs and Ensure Functional and Data Requirements Address User Needs	MacPherson	SC-310, SC-320, Adv. Group, NM, SC-130	Dec 90	Feb 91		Analysis	Analysis completed and accepted by Leopold	
3.6.5	Identify How Target System Will Change the Way the Public Users Obtain Information and How the Public Room will Operate	Spencer	SC-310, Adv. Group, NM	Feb 91	Mar 91	Target 4.2.4	Analysis of changes	Analysis approved by SC-300	

Task Title: 3.6 Public Room Information and Education Outreach for Target System

Task Manager: W. Spencer SC-324

Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
3.6.6	Prepare a Plan to Inform/Educate Users on Changes to Information Access in the Public Room and Related Areas due to Target System	Spencer	SC-311, NM, Adv. Group, SC-140	Mar 91	Apr 91	P&O Task 2.2, 2.3, 3.4, 3.5;	Action plan	Plan approved by SC-100, Adv. Group	
3.6.7	Complete Action Plan Steps and Preparation of needed Materials Including Computer Assisted Help, User Guides, Outreach Materials, etc.	Spencer	SC-311, NM, Adv. Group, SC-140	Apr 91	Award +4m	P&O Task 2.2, 2.3, 3.2, 3.3, 3.4, 3.5;	Materials prepared	Materials approved by SC-300	
3.6.8	Develop Evaluation Criteria for Information and Educational Materials	M. Martin	SC-311, NM, Adv. Group, PTC, SC-130	Award +3m	Award +4m		Criteria	Criteria approved by Leopold	
3.6.9	Test the Information and Educational in New Mexico	New Mexico	Spencer, SC-311, SC-130, New Mexico Public	Award +6m	Instal'n +2m		Info/educ materials impl plan to NM	Plan and materials admin-istered by NM	
3.6.10	Evaluate Test Against Criteria	Leopold	New Mexico, Spencer, SC-310, SC-130	Instal'n +2m	Instal'n +4m	Test completed	Evaluation summary and recom-mendations	Decision on recom-mendations by SC-300	
3.6.11	Revise or Supplement Materials as Needed	M. Martin	SC-140						
3.6.12	Prepare Guidance and Materials for All States on Education/Assistance to the Public for Target System and Require States to Prepare a Plan for Implementation	Spencer	SC-140, SC-311	TBD	TBD		IM giving guidance and transmitting info/educ materials	Signed by WO-700	

Task Title: 3.7 Inreach-Outreach Integration Strategy

Task Manager: John Moeller, WO-700

Step Order	Action Steps	Responsible Official	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
3.7.1	Authorize Task	Moeller	WO-700	May-90	May-90		Assignment of Task to WO-704, SC-310	Assignment formalized	
3.7.2	Develop Integrated Plan	Leslie Cone	WO-704, SC-310, NM PA, NM OP, Mike Kirby, Frank Splendoria	May-90	Jul-90	P&O Task 3.2, 3.3, 3.5, 3.6	Completion of Inreach and Outreach Integration Plan	Use plan to deliver common message and training to BLM employees	
3.7.3	Apply to BLM Training	PTC, Larry Hamilton	Jim Stone, Leslie Cone, Mike Kirby, SO PA Chiefs	FY 91	On-going	P&O Task 3.2, 3.3, 3.5, 3.6	BLM Inreach Training Outreach Briefings/ Documents prepared		

4 Managerial Transition

The traditional Bureau method of decision making by consensus does not readily lend itself to the decision making needed during the development and contractual phases of the target system initiatives. There are many policies and decisions relating to automation that have yet to be made. In some cases, the need for policies and decisions has not yet been clearly identified to the decision makers for their consideration. There needs to be a formalized structure which ensures issues are raised to the appropriate policy maker and resolved timely. Where expediency is critical, the Bureau decision making process needs to be structured to ensure the timeliness needs are met.

Accountability is also a concern. Decision makers and those attempting to monitor and act on decisions also must have some assurance that the decisions are being incorporated into the Bureau operations in a consistent and effective manner. Past practices of independent determinations regarding what guidance will or will not be implemented is not conducive to the orderly and consistent actions needed for effective IRM.

4.1 Management, Accountability, and Decision Making

Task Manger: Ron Hofman, WO-800

This task is directed to improve the decision making processes in the Bureau by identifying a mechanism and process for dealing with the identification, analysis, and resolution of automation/ modernization/IRM issues.

4.2 Manager's Training in IRM Responsibilities and Management

Task Manager: Bob Leopold, SC-320

This task describes the steps involved in preparing an Education Plan for training of the Bureau managers, users, and program specialists in their responsibilities in data quality assurance/control, management, sharing and exchange, use, related records and file management and LCM. The responsibilities of specialists such as the Data Administrator, Data Base Manager, Data Base Administrator, Systems Administrator, and Records Administrator will be discussed and necessary interfaces between these data specialists and the program managers and users will be identified. This education/training needs to utilize, to the full extent possible, a wide variety of media to ensure all Bureau personnel needing this information have access to it. Because of its importance, repeated exposure to the information will be beneficial. A variety of media should be considered in this education effort: existing and proposed training courses, meetings, train-the-trainer, written material, video, road shows, etc. Emphasis will be on ensuring all Bureau managers and program specialists, are reached.

A. Assumptions-

- o Managers, program leaders, and users do not have a clear understanding of the responsibilities of the Data Administrator, Data Base Administrator, Data Base Manager, and Systems Administrator or what their responsibilities in data management are.

B. Policy Considerations-

- The responsibilities of Data Administrators, Data Base Administrator, Data Base Managers, Records Administrators, and System Administrators need to be clearly defined and institutionalized in position descriptions.

Task Title: 4.2 Manager's Training in IRM Responsibilities and Management

April, 1990

Task Manager: Bob Leopold, SC-320

Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
4.2.1	Authorize Task	Moeller	Leopold, VanWyhe, WO-770, SC-320, SC-340	Feb 90	Apr 90		Memorandum	Signed by WO-700	
4.2.2	Designate Team	Leopold	SC-340, SC-310, WO-704	Apr 90	May 90		Memorandum	Signed by WO-700 or Leopold	
4.2.3	Develop strategy for educating managers/users/program spec. in IRM management functions	Team Lead	PTC, SC-340, SC-310, WO-704, Granzow, SDAs, ADDAs, WO-810	May 90	Jul 90	DA Strategy, Data Management strategy document, DA manual(TBD) Interim and Target training strategy--P&O tasks 2.2, 2.3, 2.5	Strategy Document	Approved by WO-100	Strategy and course content must be closely coordinated with DA educ. Train-P&O Task 2.2, 2.5
4.2.4	Determine media, sites, methods, and information to be used	Team Lead	PTC, SC-340, SC-310, WO-704, Field Input	May 90	July 90	Other training/educ efforts, P&O task 2.5	Plan for delivery	Approved by SC-100	
4.2.5	Develop First Course: SMT/HMT Education Module on Data Administration & IRM Management	Lovelace, CO-950	Hoem, Wing, A.Smith, Russell, PTC	9/1/89	11/28/90	SODAs, ADDAs, PTC	Draft Training Module		Completed
4.2.6	Test and Adjust SMT/HMT Education Training	PTC	SODAs, Russell, Lovelace, WO-810	11/29/90	12/30/90		Final Completed Training Module	Approval to Perform Training by WO-700/800	
4.2.7	Implement SMT/HMT Education Training	SODAs, ADDAs	VanWyhe, SODAs, ADDAs, SDCA, Lovelace	1/1/90	On-going	Coordinate with other Training, P&O Task 2.2, 2.3, 2.5 and PTC/WO	Training Performed	Courses Completed	Utah, Montana done.
4.2.8	Monitor, Evaluate, and Adjust SMT/HMT Education Module	Lovelace	Russell, SODAs	1/15/90	On-going		Training Evaluation and Revision Report	Approved (Revised) Training	

Task Title: 4.2 Manager's Training in IRM Responsibilities and Management

April, 1990

Task Manager: Bob Leopold, SC-320

Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
4.2.9	Prepare education/ training modules	Team Lead	PTC, SC-340, SC-310, WO-704, SC-Tech. Transfer, WO-810, ADDAs, SDAs	July 90	Oct 90	Available technical assistance	Education/ Training products		
4.2.10	Test education/ training components	Team Lead	PTC, pilot, WO, States, SC-320	Oct 90	Jan 91	Completed training modules	Training/ Educ. products tested on live audience	Completed test of educ./training	
4.2.11	Evaluate and revise	Team lead	PTC, SC-320	Oct 90	Feb 91	Training test completed	Evaluation summary and recommended changes	Changes approved by team lead	
4.2.12	Modify existing and future training, meetings, etc. as appropriate, to incorporate IRM training	Team Lead	PTC, State Training Officers, SDAs, ADDAs, DDAS, etc., WO-810	Feb 91	Mar 91	Completed Evaluation P&O Task 2.7	Data educ./ Training incorp. into exist/future courses	Agenda, schedules modified, new schedule issued	
4.2.13	Prepare schedule	Team Lead	PTC, WO and State Training Officers, SDAs, etc.	July 90	Mar 91	P&O 2.2, 2.5, existing training, future training/ meetings	Schedule	Schedule approved by States, PTC	

Task Title: 4.2 Manager's Training in IRM Responsibilities and Management April, 1990

Task Manager: Bob Leopold, SC-320

Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
4.2.14	Perform education/training	Varies	BDA, ADDAs, PTC, SC-320, SDAs, WO and State Training Officers, LIS coord. other	Mar 90	On-going	Schedule approved P&O Task 2.2, 2.3	Training/ education performed	Training/ education completed	
4.2.15	Monitor/evaluate for effectiveness	PTC/Leopold	Participants, PTC, WO and SO Training Officers, SC-300	Apr 91	On-going		Summary of eval. comments and recommendations for change	Decision by SC-100 on comments and recommendations for change	

The Bureau of Land Management

Master Plan for Automation

Target System Acquisition

BLM Library
Denver Federal Center
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Denver, CO 80225

For further information,
contact the Assistant Director of Support Services
FTS 343-3897

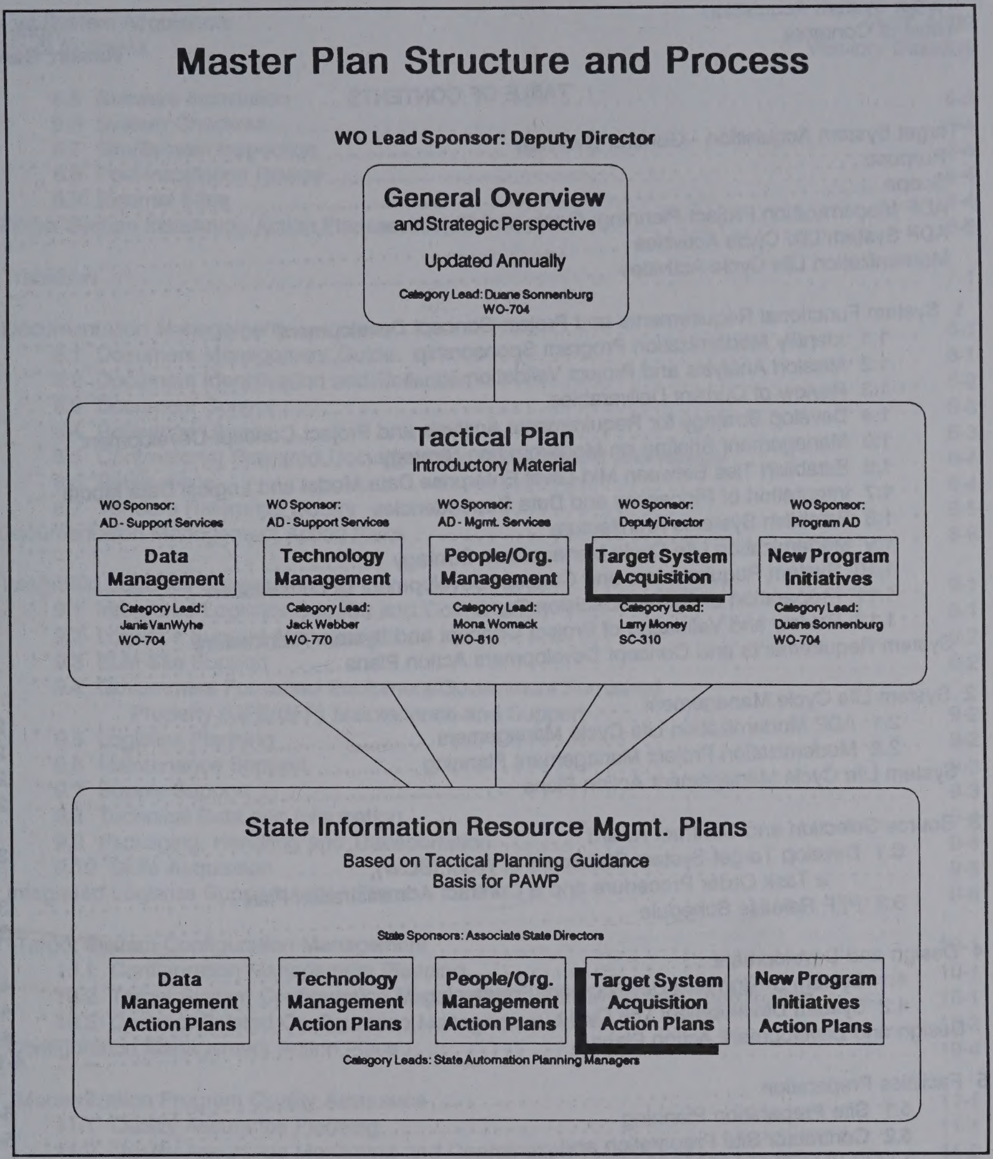
Master Plan Structure and Process
WO Lead Sponsor: Deputy Director
General Overview
and Strategic Perspective
Updated Annually
Category Lead: Duane Sonnenburg
WO-704
Tactical Plan
Introductory Material
WO Sponsor:
AD - Support Services
Data Management
Category Lead:
Janis VanWyhe
WO-704
WO Sponsor:
AD - Support Services
Technology Management
Category Lead:
Jack Webber
WO-770
WO Sponsor:
AD - Mgmt. Services
People/Org. Management
Category Lead:
Mona Womack
WO-810
WO Sponsor:
Deputy Director
Target System Acquisition
Category Lead:
Larry Money
SC-310
WO Sponsor:
Program AD
New Program Initiatives
Category Lead:
Duane Sonnenburg
WO-704
State Information Resource Mgmt. Plans
Based on Tactical Planning Guidance
Basis for PAWP
State Sponsors: Associate State Directors
Data Management Action Plans
Technology Management Action Plans
People/Org. Management Action Plans
Target System Acquisition Action Plans
New Program Initiatives Action Plans
Category Leads: State Automation Planning Managers

Figure 1. Target System Acquisition in Master Plan Organization

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Target System Acquisition - General Overview

Purpose

The Target System Acquisition Tactical Management Plan is one of five tactical management plans that comprise the BLM Master Plan for Automation. It describes IRM activities in the context of the BLM life cycle methodology contained in BLM Manual Handbook 1261 - ADP Life Cycle Management, and DOI Departmental Manual Chapter 376 DM 10. **Figure 1, Target System Acquisition in Master Plan Organization**, illustrates the relationships between IRM systems acquisition activities and the BLM Master Planning structure and process.

The Target System Acquisition Tactical Management Plan provides an overview of IRM system life cycle activities (including roles and responsibilities), and presents a structured approach to ADP life cycle management. It also identifies the IRM project activities required to manage the design, development and implementation of system/software modules comprising the Target System and new IRM projects. At a minimum, these activities will involve the acquisition, installation, check-out, testing and acceptance of new IRM systems, and systems transition into new operational environments.

Additionally, this Tactical Plan identifies Contracting Officer Representative (COR) and Contracting Officer Technical Representative (COTR) requirements in support of task activities.

Scope

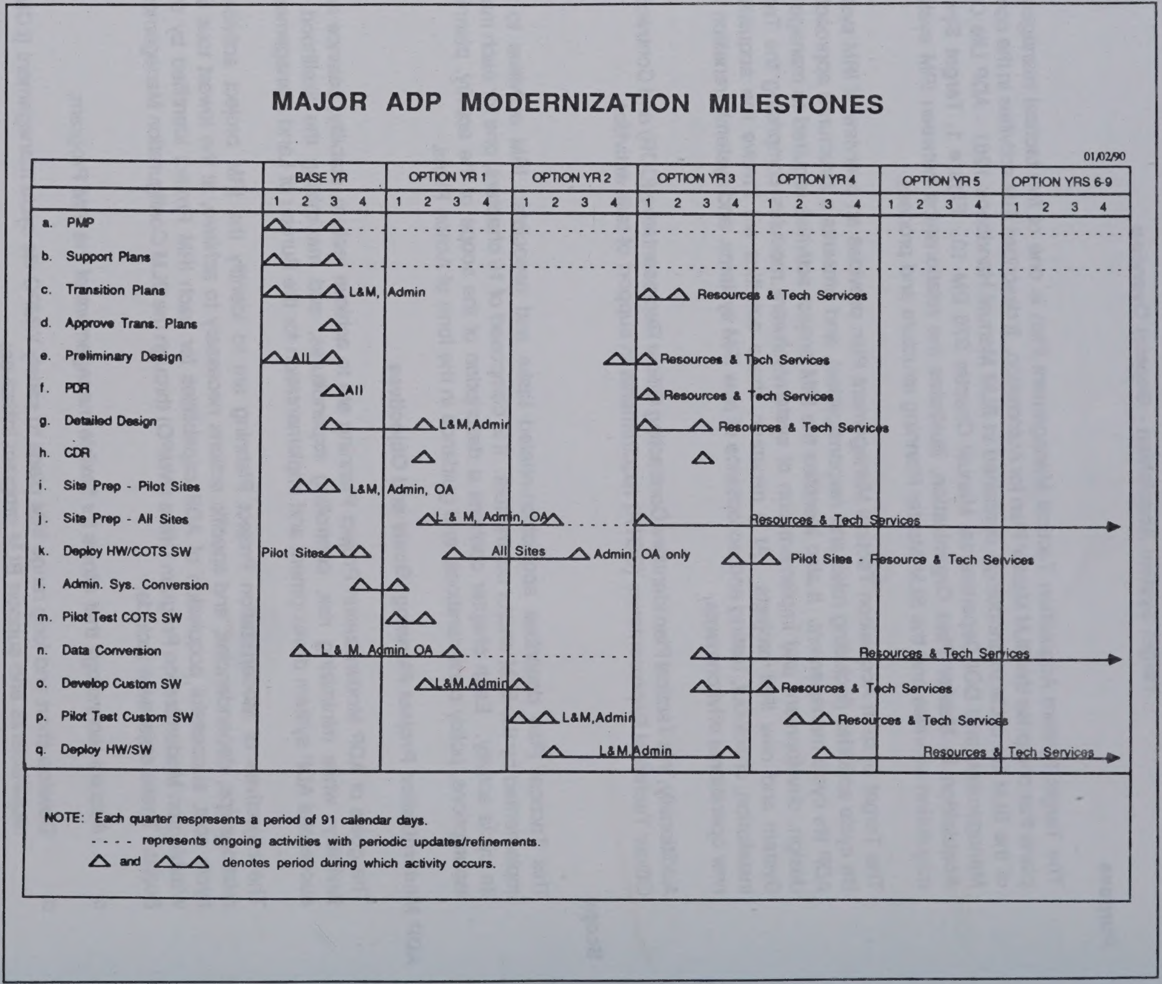
This Tactical Plan describes acquisition-related tasks and associated IRM activities to be implemented by the BLM and/or contractors. It is composed of 15 chapters, one for each major life cycle activity. Each chapter contains a description of the scope of the activity, planning assumptions, policy considerations, and guidance in the form of Action Plans.

ADP Modernization Project Planning: Goals and Objectives

The goals of ADP Modernization Project Planning are to achieve realism, stability, balance and flexibility, while minimizing risk, controlling expenditures, and maximizing the likelihood of successful ADP system development and implementation for the Bureau of Land Management.

The objectives of Modernization Project Planning are to identify the IRM project activities, relationships, dependencies, and specific actions necessary to achieve, at the lowest total life cycle cost, successful acquisition of ADP capabilities for each IRM Project identified by the Washington Modernization Program Office (WMPO) through the BLM Configuration Management Board. These objectives include:

- o Acquire technology that allows for flexible management of the IRM Program;
- o Develop short and long range IRM plans to satisfy WMPO life cycle management (LCM) requirements and support BLM program initiatives;
- o Manage the development of functional capabilities for each project and their deployment to all designated BLM sites according to the preliminary schedule presented in **Figure 2, Major ADP Modernization Milestones**;
- o Prepare overall plans to facilitate transition from existing and interim systems operations to ongoing operations and maintenance of new IRM systems. Plans will consider People and Organizations, Data and Records, and ADP systems;



MAJOR ADP MODERNIZATION MILESTONES

NOTE: Each quarter respresents a period of 91 calendar days.
- - - - represents ongoing activities with periodic updates/refinements.
△ and △△ denotes period during which activity occurs.

Figure 2. Major ADP Modernization Milestones

- Assist in training BLM personnel to operate in the modernized ADP environment;
- Plan for installation of systems at each designated site without significant degradation of ongoing operations;
- Install, checkout, test, certify, accept and document each system configuration at all designated sites;
- Achieve Initial Operational Capability (IOC) at all designated sites, on schedule and within budget;
- Support continuing project requests through requirements analysis, project concept development and prototyping to augment, supplement and/or replace system capabilities at the conclusion of the nominal Modernization life cycle.

ADP System Life Cycle Activities

The BLM will use a structured life cycle management approach for ADP systems development based on BLM H-1261 and DOI Manual Chapter 376 DM 10, integrated with (tailored) DOD-STD-2167A for the software/systems development phase of the life cycle. These documents provide guidance for IRM project management, and define life cycle activities, milestones, documentation, audits, reviews and baselines.

According to this methodology, a nominal system's life cycle proceeds from Initiation through Development to Operations and Maintenance. New systems acquisition procedures are implemented in the Initiation Phase. These activities are of special importance to IRM Systems Acquisitions in general, and the Target System in particular.

The Initiation Phase of the IRM system life cycle includes Problem Identification (or Project Request), Mission Analysis and Concept Development. In this phase, an IRM Project Request is made through the submittal of a **Statement of Need (SON)** to the WMPO. The purpose of the SON is to identify an IRM problem that may be resolved through the development or implementation of automated techniques.

Each SON must identify a **Modernization Project Sponsor**. The Project Sponsor represents the end users that will benefit from the new IRM capabilities, and is responsible for initiating a project request by submitting a **Statement of Need (SON)** in compliance with BLM H-1261. Modernization Project Sponsors are the accountable managers for defining requirements, establishing functional objectives, obtaining management approvals (including funding), and overseeing modernization projects through implementation. Modernization Project Sponsors remain accountable for annual funding for operations and maintenance, as well as determining if enhancements ("perfective maintenance") are needed for existing systems. The decision to replace a system and initiate a new life cycle is the final responsibility of a Modernization Project Sponsor.

Each SON is subjected to a review procedure and approved or disapproved. Approved project requests are chartered and subjected to **Mission Analysis** by the WMPO with as-required support from the Service Center Division of Modernization. The purpose of the Mission Analysis Phase is to validate the project request in the context of BLM mission requirements through high-level information and process modeling. The Mission Analysis will expand on the SON, evaluate the costs of not resolving the identified problem, and the benefits of successfully implementing a cost effective solution. This phase results in a **Concept Development Decision** embodied in the **Mission Needs Statement,** and accompanying documentation supporting the development decision and Mission Needs Statement.

The Mission Needs Statement and associated documentation are sent to the Division of Modernization for **Project Concept Development**. In the Concept Development phase of the life cycle, high-level functional requirements are defined and a basic systems (hardware, software, communications and data) architectures is developed. An IRM system life cycle management strategy (project plan) is also developed, along with tentative project schedules, milestones and projected costs including resource and personnel requirements. The Mission Needs Statement is revised and **System Decision Paper 1 (SDP1)** is produced.

SDP1 is reviewed by the WMPO and a **System Design Decision** is made. If approved, the IRM project is chartered through the System Design Stage of the life cycle. This is equivalent to the system/software requirements analyses, and preliminary and detailed design activities in DOD-STD-2167A. These culminate in the Critical Design Review prior to the Systems Development phase of the life cycle and the preparation of **System Decision Paper 2 (SDP2)**.

Modernization Life Cycle Activities

Modernization life cycle activities are presented in **Figure 1**, Modernization Major Milestones. This figure presents an overview of:

- Modernization Project milestones such as performing a system functional capability analysis, contract award, and monitoring system design and development activities.
- Planning activities such as user acceptance, site preparation, system installation and checkout, and providing logistical support.

To assure continuity between ADP Modernization Projects, long range Program planning will be carried out using an integrated multiple life cycle management planning approach.

The relationships between System Acquisition Tactical Management and specific life cycle activities are presented in **Figure 3, ADP Modernization Life Cycle Activities**.

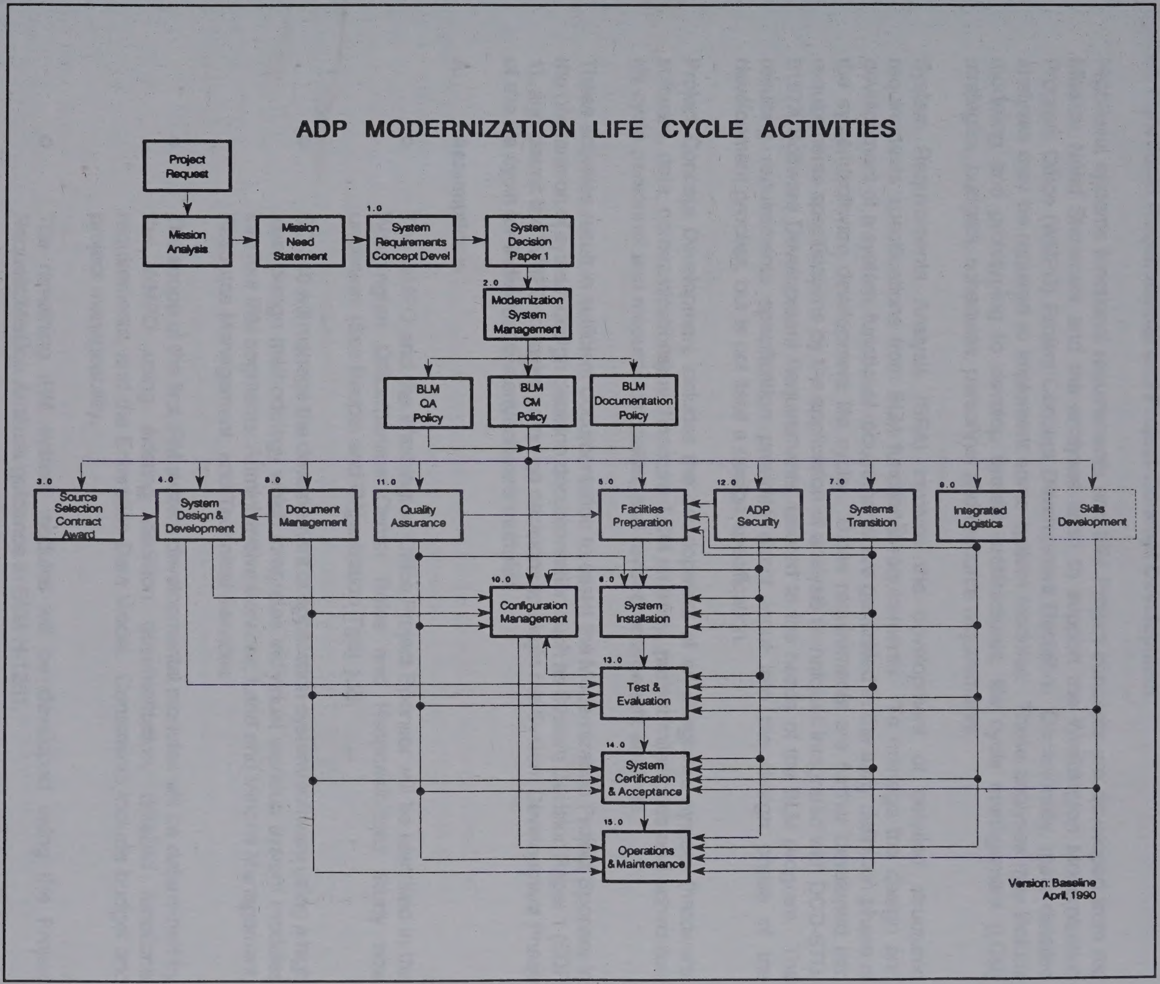


Figure 3. ADP Modernization Life Cycle Activities

1 System Functional Requirements and Project-Concept Development

High-level systems functional requirements and IRM Project concepts are developed from the Mission Need Statement and the analyses used to support the Washington Modernization Program Office (WMPO) Project Concept Development Decision. Occasionally, more detailed analyses may be required to implement some system modules. These analyses may include modeling and prototyping to develop system architectures, life cycle management (LCM) strategies, budgets, schedules, personnel and resource requirements.

System Requirements Analysis (SRA) involves the development of detailed structured requirements specifications from BLM functional requirements. To manage the design and development of a system, functional requirements are generated in the early definition phase of the system/software development life cycle. These requirements are further developed into requirements specifications by the application of analysis techniques integrated with DOD-STD-2167A Software Development Requirements, tailored to the needs of the BLM program. The resulting requirements specification provides direct input into the design phase of the development process, but is not itself a design specification.

Project Concept Development includes the development of an integrated system (hardware, software, data, communications) architecture, LCM strategy, project milestones and schedules, life cycle personnel and resource estimates, and revised cost/benefit analysis.

These activities result in sufficient documentation to assist the Modernization Project Sponsor in the preparation of system design decision documentation such as System Decision Paper 1 (SDP 1), and permit the WMPO to make go/no go decisions to begin the System Development Phase of the life cycle for individual system/software modules.

A. Assumptions-

- The WMPO and the Washington Office Project Sponsor will be identified in the Washington Office/Service Center Roles and Responsibilities Study now underway (See People and Organization Task 1.2).
- SC-310 will manage the development of application system/software using a high level design methodology which integrates individual standup system modules into four IRM segments: Administrative Services; Land and Mineral Management; Resource Management; and Technical Services.
- The scope of the first IRM system developmental modules will be determined by the WMPO using existing decision documentation, detailed functional requirements, and the Enterprise Data Model. Constraints include budget and project manageability.
- The remaining IRM system modules will be developed using the Project Request/Mission Analysis guidance in BLM H-1261.
- The Modernization Project Sponsor defines the end users of Modernization Systems, is responsible for user acceptance, and supports SC-310 for project requirements analysis.
- The Modernization Project Sponsor will develop Project Statements of Need (SONs) for functional modules and submit them to the WMPO for Mission Analysis and project validation.

- The Modernization Project Sponsor and WMPO will ensure that adequate resources, including travel and FTE, are allocated to SC-310 for execution of the Modernization Project Charter.

- Following the System Design Decision, the WMPO will charter the project through the Detail Design phase of the life cycle, and develop Memoranda of Understanding (MOUs) with the Service Center for detail system/ software design activities.

- A Mission Need Statement has been drafted by the Modernization Project Sponsor with the assistance of the WMPO and as-required support from the Service Center Division of Modernization.

- System Functional Requirements Analysis and Project Concept Development requires the formation of an interdepartmental team composed of key personnel from the Service Center and users designated by the WMPO.

B. Policy Considerations-

- The BLM will use, revise or develop standards, policies and procedures necessary for Automated Information System development in general, and the ADP Modernization Project in particular.

1.1 Identify Modernization Project Sponsorship

Task Manager: D. Stepanek, WO-101

The Washington Office Sponsor for IRM Modernization is responsible for identifying Washington Office Modernization Project Sponsors. Modernization Project Sponsors initiate IRM Projects through the submission of IRM Project Requests to the WMPO. The Modernization Project Sponsor represents the users that will benefit from the new IRM capabilities, and is responsible for initiating a project request in compliance with BLM H-1261. The Modernization Project Sponsor is the accountable manager for defining the users of IRM systems, establishing functional objectives, obtaining management approvals (including charters, MOAs, and funding) through implementation, and user acceptance. The Modernization Project Sponsor remains accountable for annual funding for operations and maintenance, as well as determining if enhancements ("perfective maintenance") are needed for existing systems. The decision to replace a system and initiate a new life cycle is the final responsibility of the Modernization Project Sponsor.

1.2 Mission Analysis and Project Validation

Task Manager: TBD, WO-???

The WMPO is responsible for validating Project Requests by performing high level Mission Analyses to determine if the SON conforms with BLM Mission Requirements. The WMPO is responsible for developing the Mission Needs Statement and making the Project Concept Development Decision which initiates the Functional Requirements Analysis and Project Concept Development phases of the system life cycle.

In general, adequate determination of BLM Mission Requirements requires the existence of an accurate and comprehensive Bureau Enterprise Model. At the present time, the BLM Business Process Model and the high level Enterprise Data Model perform this function, but neither is totally adequate. A proposal has been made to perform a high level requirements analysis and build an Enterprise Model to constrain IRM Mission Analyses. Mission analysis will be accomplished using the BLM information engineering methodology.

After validation, the WMPO will assist the Modernization Project Sponsor in the preparation of the Mission Need Statement, developing Project Charters, and obtaining funding of life cycle activities through the LCM Milestones.

1.3 Review of Current Deliverables

Task Manager: S. MacPherson, SC-315

This task involves the review of current deliverables in the context of the Mission Need Statement and supporting Mission Analysis documentation. A determination of the data/process relationships and levels of detail in these products will be made.

1.4 Develop Strategy for Requirements Analysis and Project Concept Development

Task Manager: S. MacPherson, SC-315

A strategy for Project Requirements Analysis and Concept Development will be formulated. The requirements for integration of data and process in the Modernization System will be defined. Bureauwide Systems Conversion requirements will be integrated into the strategy. A determination of how products will be used in Modernization planning process will be made, and a briefing package prepared.

1.5 Management Briefing on Modernization Strategy

Task Manager: S. MacPherson, SC-315

A briefing to the Acting Deputy Service Center Director and SC-300 Division Managers will be conducted; recommendations will be presented. Service Center Management will provide recommendations and directions to the Requirements Analysis/Concept Development Staff for planning and analysis activities. Findings will forwarded to the WMPO for informational purposes.

1.6 Establish Ties Between Mid-Level Enterprise Data Model and Logical Data Model

Task Manager: M. Thompson, SC-322

The Washington Office mid-level action plan will be reviewed and a plan to integrate the mid-level Enterprise Data Model with the Logical Data Model will be developed. CASE tools will be tested, a work breakdown structure developed, and traceability requirements established.

1.7 Integration of Processes and Data Dependencies

Task Manager: S. MacPherson, SC-315

Based on the requirements in the approved Modernization Strategy, a methodology for integrating process with high, medium and low-level data dependencies will be developed and implemented.

1.8 Establish Systems Architecture

Task Manager: E. Strand, SC-314

The Preliminary Systems Architecture (data, hardware, software and communications) for Bureauwide Administrative, Lands and Minerals, Resources and Technical Services Systems will be defined.

1.9 Modernization Life Cycle Management Strategy

Task Manager: L. Money, SC-310

This task involves the definition of requirements for successful System LCM. The following areas will be considered:

- System LCM strategy;
- Overall project management requirements including staff and resource requirements, project organizational structure, roles and responsibilities, lines of communication, project reporting procedures and scheduling requirements;
- Project management tools and capabilities to track activities, report status, define schedules and resource requirements, anticipate conflicts and problems, develop methods of resolution;
- Modernization Project Statements of Work for the System Integrator;
- Contractor Task Order procedures;
- Contract administration;
- Bureauwide systems conversion/transition strategy;
- State-unique applications systems conversion;
- State Office funding for software improvement, unique applications, and data conversion.

1.10 System Requirements and Concept Development Documentation

Task Manager: S. MacPherson, SC-315

This task involves the preparation of required system design documentation leading to the development of System Decision Paper 1 for system/software modules. Documentation includes the following:

- Revised System objectives;
- Complete definition of the high level systems architecture based upon the results of the Mission Analysis phase of the life cycle and the Functional Requirements Analysis performed in the Concept Development phase of the life cycle;
- Recommended revisions of the Mission Needs Statement;

- Complete System LCM Plan;
- Revised benefit/cost figures;
- Critical developmental and testing milestones as defined in BLM tailored DOD-STD-2167A and other applicable standards;
- Documentation of the Target System SOW, Contractor Task Order Procedures, and other relevant contract-monitoring activities.
- Documentation of agreements reached between participating organizations.

1.11 Preparation of System Decision Paper 1

Task Manager: TBD, WO-???

The Modernization Project Sponsor is responsible for the preparation of SDP 1 in accordance with the requirements of BLM H-1261. This document, and all supporting documentation and briefing materials, will be prepared with the assistance of the Service Center Division of Modernization, SC-310.

SC-310 will assist the Modernization Project Sponsor in the presentation of SDP 1 to the WMPO for review, and provide technical support to the Project Sponsor, as required, during the WMPO review and validation.

1.12 Review and Validation of Project Concept and SDP 1

Task Manager: TBD, WO-???

The WMPO will validate that:

- Management priorities have been addressed to meet BLM automation objectives;
- The proposed LCM strategy and system architecture minimizes risk;
- All major personnel, resource and budget requirements have been identified;
- A realistic system development schedule has been proposed, given the requested level of funding and allocated resources.

Upon validation of the proposed project, the Modernization Project Sponsor and WMPO are responsible for ensuring that:

- The remaining SC-310 LCM activities under the project charter are reviewed and validated;
- The project charter clearly defines the scope of the project consistently with the Mission Need Statement;
- MOUs are drafted and sufficient funding and resources are available to complete life cycle activities through the Critical Design Review (CDR) at the completion of the System Design phases of the life cycle;

- Sufficient funding and resources are available to document the system design, prepare documentation to support the System Development/Acquisition Decision, and prepare System Decision Paper 2 (SDP 2).

Task Title: 1.1 Modernization Project Sponsorship

Task Manager: TBD, WO-???

Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
1.1.1	Identify WO Modernization Project Sponsor	D. Stepanek, WO-101	TBD	TBD	TBD	BLM H-1261	TBD	TBD	
1.1.2	Develop IRM Project Statement of Need	WO Modernization Project Sponsor	TBD	TBD	TBD	Problem Identification	TBD	TBD	
1.1.3	Develop IRM Project Request	WO Modernization Project Sponsor	TBD	TBD	TBD	Completion of 1.1.1	TBD	TBD	
1.1.4	Identify End Users	WO Modernization Project Sponsor	TBD	TBD	TBD	Completion of 1.1.2	TBD	TBD	
1.1.5	Define User Groups for Requirements	WO Modernization Project Sponsor	TBD	TBD	TBD	Completion of 1.1.3	TBD	TBD	
1.1.6	Define User Groups for Acceptance	WO Modernization Project Sponsor	TBD	TBD	TBD	Completion of 1.1.4	TBD	TBD	
1.1.7	Draft Memoranda of Agreement	WO Modernization Project Sponsor	TBD	TBD	TBD	Completion of 1.1.5	TBD	TBD	
1.1.8	Participate in Washington Modernization Project Office (WMPO) Development of Project Charter	WO Modernization Project Sponsor	TBD	TBD	TBD	Completion of 1.1.6	TBD	TBD	
1.1.9	Send SON and Project Request to WMPO for Mission Analysis	WO Modernization Project Sponsor	TBD	TBD	TBD	Completion of 1.1.7	TBD	TBD	

Task Title: 1.1 Modernization Project Sponsorship

Task Manager: TBD, WO-???

Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
1.1.10	Secure Resources and Funding for Mission Analysis	WO Modernization Project Sponsor	TBD	TBD	TBD	Completion of 1.1.8	TBD	TBD	
1.1.11	Support WMPO Mission Analysis	WO Modernization Project Sponsor	TBD	TBD	TBD	Completion of 1.1.9	TBD	TBD	
1.1.12	Validate Mission Needs Statement	WO Modernization Project Sponsor	TBD	TBD	TBD	Completion of 1.1.10	TBD	TBD	
1.1.13	Validate Concept Development Decision	WO Modernization Project Sponsor	TBD	TBD	TBD	Completion of 1.1.11	TBD	TBD	
1.1.14	Secure Funding for Project Concept Development	WO Modernization Project Sponsor	TBD	TBD	TBD	Completion of 1.1.12	TBD	TBD	
1.1.15	Support High-Level Functional Requirements Analysis and Project Concept Development	WO Modernization Project Sponsor	TBD	TBD	TBD	Completion of 1.1.13	TBD	TBD	
1.1.16	Validate SDP 1	WO Modernization Project Sponsor	TBD	TBD	TBD	Completion of 1.1.14	TBD	TBD	
1.1.17	Validate System Design Decision	WO Modernization Project Sponsor	TBD	TBD	TBD	Completion of 1.1.15	TBD	TBD	
1.1.18	Support and Validate Life Cycle Decisions and Project Documentation	WO Modernization Project Sponsor	TBD	TBD	TBD	Completion of 1.1.16	TBD	TBD	

Task Title: 1.2 Mission Analysis and Project Validation

Task Manager: TBD, WO-???

Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
1.2.1	Review SON and Project Request	Washington Modernization Project Office (WMPO)	TBD	TBD	TBD	1.1.8	TBD	TBD	
1.2.2	Review and Approve Project Request	WMPO	TBD	TBD	TBD	1.2.1	TBD	TBD	
1.2.3	Charter Project for Mission Analysis Phase of Life Cycle	WMPO	TBD	TBD	TBD	1.2.2	TBD	TBD	
1.2.4	Perform Mission Analysis	SC-310	WMPO	TBD	TBD	1.2.3	TBD	TBD	
1.2.5	Develop Mission Needs Statement and Documentation	SC-310	WMPO	TBD	TBD	1.2.4	TBD	TBD	
1.2.6	Make Concept Development Decision	WMPO	SC-310	TBD	TBD	12.5	TBD	TBD	
1.2.7	Charter Project for Concept Development Phase of Life Cycle	WMPO	SC-310	TBD	TBD	1.2.6, 1.1.11	TBD	TBD	
1.2.8	Support High Level Functional Requirements Analysis and Project Concept Development	WMPO	TBD	TBD	TBD	1.4	TBD	TBD	
1.2.9	Review SDP 1	WMPO	SC-310	TBD	TBD	1.11	TBD	TBD	
1.2.10	Make System Design Decision	WMPO	SC-310	TBD	TBD	1.2.9	TBD	TBD	
1.2.11	Charter Project for System Design Phase of Life Cycle	WMPO	SC-310	TBD	TBD	1.2.10	TBD	TBD	
1.2.11	Validate Life Cycle System Decision Papers, Make Project Decisions, and Charter Project for Next Phase of Life Cycle	WMPO	SC-310	TBD	TBD	Various Activities in Sequence	TBD	TBD	

Task Title: 1.3 Review Current Deliverables

April 1990

Task Manager: S. MacPherson, SC-315

Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
1.3.1	Develop Equipment/Staffing/Procedures Plan	SC-315 or as determined	Manager, Technical Coordinator	4/15/90	4/30/90		Preliminary staffing and procedure planning documents. Briefing for SC management.	SC-310 Approval	
1.3.2	Set Up Project Team and Methodology	SC-315 or as determined	Manager, Technical Coordinator	5/1/90	5/30/90	Step 1	Project charter documents. Briefing for SC management.	SC-310 Approval	
1.3.3	Develop Administrative Applications Detailed Requirements	SC-315 or as determined	SC-315 Systems Analyst 1	6/1/90	9/1/91	Step 2	Detailed functional specification document for Administrative applications development.	SC-315 Review	
1.3.3.1	Identify Data Entities that Apply to Administrative Applications	SC-315	MacMillan	6/1/90	9/1/91				
1.3.3.2	Resolve Data Entity Naming and Definition Conflicts	SC-315	MacMillan	6/1/90	9/1/91				
1.3.3.3	Maintain Traceability of Resolved Data Entity Names to Original Source Names	SC-315	MacMillan	6/1/90	9/1/91				
1.3.3.4	Identify Relationships Between Resolved Data Entities	SC-315	MacMillan	6/1/90	9/1/91				

Task Title: 1.3 Review Current Deliverables

Task Manager: S. MacPherson, SC-315

Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
1.3.3.5	Produce an Administrative Applications Logical Data Model Based on the Resolved Data Entity Names and the Relationships Identified Between Them	SC-315	MacMillan	6/1/90	9/1/91				
1.3.3.5. 1	Identify Which Data Entities in the Logical Data Model are Used by Each Automated or Manual Function	SC-315	MacMillan	6/1/90	9/1/91				
1.3.3.5. 2	Identify Which Automated or Manual Functions Use Each Data Entity in the Logical Data Model	SC-315	MacMillan	6/1/90	9/1/91				
1.3.4	Develop Tech Svcs Detailed Requirements	SC-315 or as determined	SC-315 Systems Analyst 2	6/1/90	9/1/91	Step 2	Detailed functional specification document for Tech Svcs systems development.	SC-315 Review	
1.3.4.1	Identify Data Entities that Apply to Technical Services	SC-315	Edler, TBD	6/1/90	9/1/91				
1.3.4.2	Resolve Data Entity Naming and Definition Conflicts	SC-315	Edler, TBD	6/1/90	9/1/91				
1.3.4.3	Maintain Traceability of Resolved Data Entity Names to Original Source Names	SC-315	Edler, TBD	6/1/90	9/1/91				
1.3.4.4	Identify Relationships Between Resolved Data Entities	SC-315	Edler, TBD	6/1/90	9/1/91				

Task Title: 1.3 Review Current Deliverables

Task Manager: S. MacPherson, SC-315

Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
1.3.4.5	Produce a Technical Services Logical Data Model Based on the Resolved Data Entity Names and the Relationships Identified Between Them	SC-315	Edler, TBD	6/1/90	9/1/91				
1.3.4.5.1	Identify Which Data Entities in the Logical Data Model are Used by Each Automated or Manual Function	SC-315	Edler, TBD	6/1/90	9/1/91				
1.3.4.5.2	Identify Which Automated or Manual Functions Use Each Data Entity in the Logical Data Model	SC-315	Edler, TBD	6/1/90	9/1/91				
1.3.5	Develop Resources Detailed Requirements	SC-315	SC-315 Systems Analyst 2	6/1/90	9/1/91	Step 2	Detailed functional specification document for Resources systems development.	SC-315 Review	
1.3.5.1	Identify Data Entities that Apply to Resources	SC-315	Shaffer, Fessler	6/1/90	9/1/91				
1.3.5.2	Resolve Data Entity Naming and Definition Conflicts	SC-315	Shaffer, Fessler	6/1/90	9/1/91				
1.3.5.3	Maintain Traceability of Resolved Data Entity Names to Original Source Names	SC-315	Shaffer, Fessler	6/1/90	9/1/91				
1.3.5.4	Identify Relationships Between Resolved Data Entities	SC-315	Shaffer, Fessler	6/1/90	9/1/91				

Task Title: 1.3 Review Current Deliverables

April 1990

Task Manager: S. MacPherson, SC-315

Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
1.3.5.5	Produce a Resources Logical Data Model Based on the Resolved Data Entity Names and the Relationships Identified Between Them	SC-315	Shaffer, Fessler	6/1/90	9/1/91				
1.3.5.5.1	Identify Which Data Entities in the Logical Data Model are Used by Each Automated or Manual Function	SC-315	Shaffer, Fessler	6/1/90	9/1/91				
1.3.5.5.2	Identify Which Automated or Manual Functions Use Each Data Entity in the Logical Data Model	SC-315	Shaffer, Fessler	6/1/90	9/1/91				
1.3.6	Develop L&M Records Detailed Requirements	SC-315	SC-315 Systems Analysts 2, Adjudicator	6/1/90	9/1/91	Step 2	Detailed functional specification document for L&M Records system development.	SC-315 Review	
1.3.6.1	Identify Data Entities that Apply to L&M Records	SC-315	Monash, TBD	6/1/90	9/1/91				
1.3.6.2	Resolve Data Entity Naming and Definition Conflicts	SC-315	Monash, TBD	6/1/90	9/1/91				
1.3.6.3	Maintain Traceability of Resolved Data Entity Names to Original Source Names	SC-315	Monash, TBD	6/1/90	9/1/91				
1.3.6.4	Identify Relationships Between Resolved Data Entities	SC-315	Monash, TBD	6/1/90	9/1/91				

Task Title: 1.3 Review Current Deliverables

Task Manager: S. MacPherson, SC-315

Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
1.3.6.5	Produce a L&M Records Logical Data Model Based on the Resolved Data Entity Names and the Relationships Identified Between Them	SC-315	Monash, TBD	6/1/90	9/1/91				
1.3.6.5.1	Identify Which Data Entities in the Logical Data Model are Used by Each Automated or Manual Function	SC-315	Monash, TBD	6/1/90	9/1/91				
1.3.6.5.2	Identify Which Automated or Manual Functions Use Each Data Entity in the Logical Data Model	SC-315	Monash, 3 TBD	6/1/90	9/1/91				
1.3.7	Determine Data/Metadata Needed for Design	TBD	Data Specialist(s), TBD	6/1/90	9/1/91	Step 2	Detailed data specification document for integrated systems development.	SC-315 Review	
1.3.8	Build Automated Document Database	TBD	Clerical Staff	6/1/90	9/1/91	Step 1	Automated document database.	SC-310 Approval	
1.3.9	Publish Final System Spec Documents	TBD	Clerical Staff	6/1/90	9/1/91	All above	Authorized specification documents	SC-310 Approval	

Task Title: 1.4 Develop Strategy for Requirements Analysis and Project/Concept Development April 1990

Task Manager: S. MacPherson, SC-315

Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
1.4.1	Develop Strategy for Requirements Analysis	TBD	TBD	TBD	TBD	TBD	TBD	TBD	
1.4.2	Project Management and Concept Development Strategy	TBD	TBD	TBD	TBD	TBD	TBD	TBD	
1.4.3	Define Data and Process Integration Requirements	TBD	TBD	TBD	TBD	TBD	TBD	TBD	
1.4.4	Develop Data and Process Integration Strategy	TBD	TBD	TBD	TBD	TBD	TBD	TBD	
1.4.5	Develop Product Use and User Interface Concepts	TBD	TBD	TBD	TBD	TBD	TBD	TBD	
1.4.6	Prepare Briefing Package for SC Division Chiefs and IRM Project Management Staff	TBD	TBD	TBD	TBD	TBD	TBD	TBD	

Task Title: 1.5 Management Briefing on Modernization Strategy

April 1990

Task Manager: D. Stepanek, WO-101

Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
1.5.1	Present Briefing to SC Division Chiefs and IRM Project Management Staff	TBD	TBD	TBD	TBD	TBD	TBD	TBD	

Task Title: 1.6 Establish Ties Beween Mid-Leval EDM and LDM

Task Manager: M. Thompson, SC-322

Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
1.6.1	Review Mid-Level Action Plan	TBD	TBD	TBD	TBD	TBD	TBD	TBD	
1.6.2	Write Integration Plan	TBD	TBD	TBD	TBD	TBD	TBD	TBD	
1.6.3	Test CASE Tools	TBD	TBD	TBD	TBD	TBD	TBD	TBD	
1.6.4	Develop Work Breakdown Structure (WBS)	TBD	TBD	TBD	TBD	TBD	TBD	TBD	
1.6.5	Establish Traceability Requirements	TBD	TBD	TBD	TBD	TBD	TBD	TBD	

Task Title: 1.7 Integration of Process and Data-Dependencies

Task Manager: S. MacPherson, SC-315

Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
1.7.1	Develop Integration Methodology	TBD	TBD	TBD	TBD	TBD	TBD	TBD	
1.7.2	Approve Methodology	TBD	TBD	TBD	TBD	TBD	TBD	TBD	
1.7.3	Implement Methodology	TBD	TBD	TBD	TBD	TBD	TBD	TBD	

Task Title: 1.8 Establish Systems Architecture

Task Manager: E. Strand, SC-314

Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
TBD	TBD								

Task Title: 1.9 Modernization LCM Strategy

Task Manager: L. Money, SC-310

Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
TBD	TBD								

Task Title: 1.10 System Requirements and Concept Development Documentation

Task Manager: S. MacPherson, SC-315

Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
1.10.1	Revise System Objectives (SON)	TBD	TBD	TBD	TBD	TBD	TBD	TBD	
1.10.2	Document High-Level Systems Architecture	TBD	TBD	TBD	TBD	TBD	TBD	TBD	
1.10.3	Revise Mission Needs Statement	TBD	TBD	TBD	TBD	TBD	TBD	TBD	
1.10.4	Complete Project LCM Plan	TBD	TBD	TBD	TBD	TBD	TBD	TBD	
1.10.5	Revise Budget/Cost Figures	TBD	TBD	TBD	TBD	TBD	TBD	TBD	
1.10.6	Identify Critical Design, Development and Testing Milestones	TBD	TBD	TBD	TBD	TBD	TBD	TBD	
1.10.7	Document Contractor Monitoring Requirements/ Activities	TBD	TBD	TBD	TBD	TBD	TBD	TBD	
1.10.8	Document Agreements Between Participating Organizations	TBD	TBD	TBD	TBD	TBD	TBD	TBD	

Task Title: 1.11 Preparation of SDP 1

April 1990

Task Manager: D. Stepanek, WO-101

Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
TBD	TBD								

Task Title: 1.12 Review and Validate Project Concept and System Architecture April 1990

Task Manager: WPO, WO-???

Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
TBD	TBD								

2 System Life Cycle Management

System Life Cycle Management (LCM) consists of acquiring the tools and techniques to implement system LCM, and implementing short and long range plans for Modernization in a controlled fashion that minimizes risk and maximizes the opportunities to achieve BLM Modernization goals. The purpose of LCM, especially in an integrated multiple life cycle environment, is to ensure that long-range BLM Modernization Program and budget objectives are met.

The methodologies, strategies, and actions identified in the System Requirements and Concept Development Section serve as the basis for Modernization System LCM. This Section identifies project management activities associated with specific LCM activities.

The scope of system LCM includes: preparing implementation guidelines for State Offices; defining project tracking, reporting and documentation requirements; managing the source selection process, contract monitoring, and task order procedures; configuration management, quality assurance and documentation of Modernization systems; system design and development; system security requirements including data and systems access; site preparation; system installation and checkout; test and evaluation; and system transition, including planning for operations and maintenance.

A. Assumptions-

- o Acquisition of the first Modernization system modules to be implemented are just the start of coordinated ADP Modernization for the Bureau.
- o Starting with this acquisition, all Bureauwide ADP Modernization activities will be integrated.
- o System acquisition activities that extend into the operations and maintenance phase of the BLM System life cycle will be coordinated between the Divisions of Modernization (SC-310) and Systems Engineering (SC-340).
- o BLM will establish and implement the policies and procedures necessary to guide integrated ADP Modernization activities.
- o System life cycle development activities, including design and development milestones, decision points, reporting and documentation requirements, will comply with BLM Manual Handbook 1261.
- o All LCM activities will be initiated by the Washington Modernization Project Office (WMPO) based upon documentation initiated by the Modernization Project Sponsor.
- o Service Center Requirements Analysis and Project Concept Development activities for each project will be based upon Mission Need Statements generated by the Modernization Project Sponsor, with the assistance of the WMPO, and Washington Office-developed Mission Analysis documentation.
- o Modernization Project Requirements Analyses and Concept Development will not be initiated until a project is chartered and funded through the System Design Decision Phase of the life cycle.

- o LCM will not begin until a project is chartered and funded through the system Critical Design Review at the completion of the Detailed Design Phase of the life cycle, and the preparation of System Decision Paper 2 (SDP 2).

B. Policy Considerations-

- o Establish clear BLM line and staff responsibility for implementing Bureauwide ADP Modernization life cycle activities, starting with IRM Modernization.

- o Define BLM organizational roles, responsibilities, divisions of labor, policies and procedures for coordinating ADP Modernization activities (see People and Organization Chapters 1.1, 1.2, 2.3 and 2.4).

2.1 ADP Modernization Life Cycle Management

Task Manager: L. Money SC-310

The following paragraphs define the major program management requirements for implementing ADP Modernization projects.

Acquire Modernization Project Management Staff

Assign a qualified project management staff (including staff-level support) to oversee ADP Modernization activities. Organizational structure, roles and responsibilities, lines of communication, project management reporting procedures and scheduling requirements will be clearly defined.

Acquire Project Management Tools and Capabilities

Acquire project management tools, including project status reporting capabilities, required to manage and track ADP Modernization Projects.

Implement Target System Life Cycle Management

Base upon the results of the WMPO Mission Analysis and the Service Center Requirements Analysis and Concept Development activities, initiate and manage System development and implementation life cycle activities. Assist in developing and implementing Systems Transition plans, and plan for transfer of management responsibilities of Systems to SC-340 and the States for operations and maintenance.

2.2 Modernization Project Management Planning

Task Manager: L. Money SC-310

Based upon the Modernization Life Cycle Management Strategy, the SC-310 Modernization Project Office, in coordination with other BLM offices, will develop integrated Systems Project Management Plans for the acquisition and implementation of Modernization Systems. Service Center and State Office Guides for accomplishing specific life cycle activities will be prepared by the appropriate organizations. Priorities, site pre-planning and preparation activities, schedules for site installations, and management and change control of systems configurations will be determined and/or coordinated between responsible BLM organizations.

High level project management planning will ensure that all major modernization activities are identified and planned for, and that major project milestones, reporting requirements and documentation are defined. Prepare and refine schedules for major project activities over the life cycle of the system.

An integral part of project management is tracking and reporting systems development and implementation progress. These activities assist in the managing project activities, identifying problem areas and suggesting remedies, and keeping WMPO, State Office and Service Center managers apprised of current activities and project status.

Various divisions at the Service Center, in coordination with other BLM offices, will develop plans which define the responsibilities, range, scope and schedule of specific Modernization life cycle activities at designated BLM sites.

- Monitoring Design/Development Activities - Define the requirements and monitor the progress of systems design and development activities in an integrated, coordinated life cycle environment. Ensure that contractor activities conform with BLM requirements.

- Facilities Preparation Planning - Develop plans for preparing designated facilities to receive the Target System according to BLM scheduling requirements.

- System Installation Planning - Develop plans to install and checkout Modernization Systems at designated facilities with minimal interruption to daily operations according to BLM scheduling requirements.

- Integrated Logistic Support Planning - Develop plans to provide integrated logistical support systems acquisition. ILS plans will address: maintenance; supply; technical data; packaging, handling, storage and transportation of materials.

- System Transition Planning - Participate in planning to replace and/or integrate current and interim ADP systems into the Modernization environment. Plans will address: People and Organization transition; user acceptance and support; ADP site inventories; site transition; systems conversion; cutover; and GFE removal/relocation.

- Document Management Guidance - Develop procedures in compliance with BLM document management policies for collecting, reviewing, organizing, managing and distributing systems-related documentation and contractor-supplied deliverables.

- Configuration Management Planning - Define BLM and contractor configuration management requirements and responsibilities for Modernization Systems. Define Modernization hardware, software, communications and data configuration items (CIs) and baselines. Define requirements for functional and physical configuration audits. Identify requirements and procedures for qualification reviews and status accounting. Define procedures for managing changes to baseline configurations.

- Quality Assurance Planning - Using BLM quality assurance policies, identify quality standards, factors, and methods of measurement and compliance for Modernization Systems. Develop quality assurance plans for COTS hardware, software, communications, and data. Define requirements for design reviews, and monitoring System Development and Implementation life cycle activities.

- Test and Evaluation Planning - Develop plans for testing and evaluating Modernization System functionality, related activities such as skills development/training, and logistical support system operations during the Development and Implementation Phases of the life cycle.

- System Security Planning - Develop a System Security Engineering Plan for implementing BLM security policies. Define the level of confidentiality and protection required for Modernization systems physical resources and data.
- System Certification and Acceptance Planning - Define BLM responsibilities for reviewing, evaluating, certifying, and accepting Modernization Systems, and prepare guidance for their implementation.
- System Operations and Maintenance Planning - Assist in developing strategic plans to sustain Modernization Systems in the Operations and Maintenance phase of the life cycle.

Task Title: 2.1 ADP Modernization Life Cycle Management

Task Manager: L. Money SC-310

Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
2.1.1	Acquire Project Management Staff	L.Money SC-310	TBD	Ongoing	TBD				
2.1.2	Acquire Project Management Tools	L.Money SC-310	TBD	Ongoing	TBD				
2.1.3	Implement Target System Acquisition Management	L.Money SC-310	SC-310, SC-320, SC-340, SC-652B	TBD	TBD				

Task Title: 2.2 Project Management Planning

April 1990

Task Manager: L. Money SC-310

Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
2.2.1	High Level Target System Acquisition Planning	L.Money SC-310	SC-310, SC-320, SC-340, SC-652B	Ongoing	TBD				
2.2.2	Project Status Tracking and Reporting	L.Money SC-310		Ongoing	TBD				

Task Title: 2.3 Life Cycle Management Activities Planning

Task Manager: L. Money SC-310

Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
2.3.1	Monitor Design/Development Milestones	L.Money SC-310	Strand	Ongoing	TBD				
2.3.2	Facilities Preparation Planning	L.Money SC-310	Barrell, SOs	Apr 89	TBD				
2.3.3	Target System Installation Planning	L.Money SC-310	Barrell, SOs	Apr 89	TBD				
2.3.4	Integrated Logistic Support Planning	L.Money SC-310	Barrell, SOs	July 89	TBD				
2.3.5	ADP System Transition Planning	L.Money SC-310	Rhinehart, SOs	Apr 90	TBD				
2.3.6	Target System Document Management Planning	L.Money SC-310	McGinnis, SOs	Nov 89	TBD				
2.3.7	Target System Configuration Management Planning	L.Money SC-310	Kirby, SOs	Jan 90	TBD				
2.3.8	Target System Quality Assurance Planning	L.Money SC-310	Probert, SOs	Nov 89	TBD				
2.3.9	Target System Security Planning	L.Money SC-310	Kirby, SOs	TBD	TBD				
2.3.10	Target System Test and Evaluation Planning	L.Money SC-310	Probert, SOs	Nov 89	TBD				
2.3.11	Target System Certification and Acceptance Planning	L.Money SC-310	Probert, SOs	Nov 89	TBD				
2.3.12	Target System Operations and Maintenance Planning	L.Money SC-310	Kirby, SOs	TBD	TBD				

Task Title: 2.4 Life Cycle Activities Implementation

Task Manager: L. Money SC-310

Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
2.4.1	Perform Action Planning	L.Money SC-310	Task Managers						
2.4.2	Action Planning Activities Reporting	L.Money SC-310	Task Managers						

3 Source Selection and Contract Award

There are many internal tasks which must be accomplished prior to selection of a contractor for the target system. A synopsis of those tasks is itemized below.

3.1 Develop Target System Statement of Work (SOW), a Task Order Procedure and a Contract Administration Plan

Task Manager: B. Beierle SC-652B

The RFP development task has been completed. The RFP is complete except for amendments that result from discussions with OMB and GSA in the approval process, and amendments after it is issued.

The Task Order Procedure stipulates that the contractor will initially develop each task order and estimated cost for review and approval of the Contracting Officer's Representative prior to issuance of the task order for commencement of performance.

The Contract Administration Plan must provide sufficient control for BLM to manage the Target System contract administration after award. The content of the different task orders, based on this plan, will be determined by BLMs management priorities for automation and will provide measurable objectives for the contractor to meet. This will be a joint effort between the BLM and the Contractor wherein the Contractor provides the technical and system integration/implementation expertise and the BLM provides program direction.

A. **Assumptions-**

- o All tasks issued must comply with the Statement of Work of the Contract. Major Deviations from the Statement of Work could precipitate post-award protests by unsuccessful vendors.
- o Modernization Requirement Analysis Approach (internal crosswalk) must identify duplications between BLMs different programs and lump similar functionalities as described in the RFP.
- o This will avoid duplication of effort by the Target Vendor and speed completion of the Target System by developing task orders based on crosswalking the documentation of current system capabilities (including planned changes in the interim time frame) and strategic information planning with the contract specification of functional and data requirements.

B. **Policy Considerations-**

- o Primary management concern is to reduce the risk of a failed system development effort where funds are expended but the product is unacceptable.

3.2 RFP Release Schedule

Task Manager: B. Beierle SC-652B

The following schedule approximates the current schedule for RFP release, evaluation and award. The schedule will slip accordingly if the issuance is delayed.

Issue RFP	April	1990
Vendor Questions Due	May	1990
Proposals Due	July	1990
Notice of Competitive Range; Begin Negotiations	December	1990
Complete LTDs	May	1991
Call for BAFOs	June	1991
BAFOs Due	July	1991
Award Contract	August	1991

4 Design and Development

This section describes the Target System design and development activities in terms of a System Development Life Cycle (SDLC) methodology and identifies the milestones for tracing and reporting progress in designing and developing the Target System.

The BLM will plan, coordinate and integrate the technical program tasks and requirements necessary for ADP Modernization. The BLM will establish effective control over the system engineering process for Target System design and development, including the use of procured contract items and services (refer to Figure 4.0-1., Systems Development, Reviews, and Audits). This will ensure that cost, performance, and schedule requirements are met, and provide early indication of problems to resolve and reduce risk.

A. Assumptions-

- The BLM will implement a system to track and report Target System design and development activities.
- The BLM will use a SDLC methodology compatible with requirements of DOD-STD-2167A (as tailored), DOI Life Cycle Management Guidelines, and BLM Manual Handbook 1261.
- The "High Level Design" activity denotes those SDLC activities which culminate in the preparation for the Preliminary Design Review (PDR). These include System Requirements Review (SRR), System Design Review (SDR), Hardware Specification Review (HSR), Software Requirements Analysis, Software Specification Review (SSR), and Preliminary Design.
- The BLM input and guidance to the Target System design and development activities will use information and results from the Data Management information engineering activities, the Target System Requirement Analysis activities (Task 2, Modernization Requirements Analysis) and the Software Improvement Program (SIP).
- The BLM will design and develop prototypes as necessary to refine requirements, analyze alternatives, evaluate capabilities, enhance skills, define test and acceptance criteria and prepare test materials. Some prototype development activities are dependent upon Experimental Data Integration Data Base construction.
- The BLM will use multiple iterations of the SDLC to accommodate segmented development of integrated BLM functional applications.
- The BLM will use a team of in-house and contract staff to perform Independent Validation and Verification activities needed to accomplish review and acceptance milestones.

B. Policy Considerations-

- The BLM will develop or revise policies necessary for Automated Information System (AIS) development, and in particular, for the ADP Modernization Project which address configuration management, standards, security, and procurement.

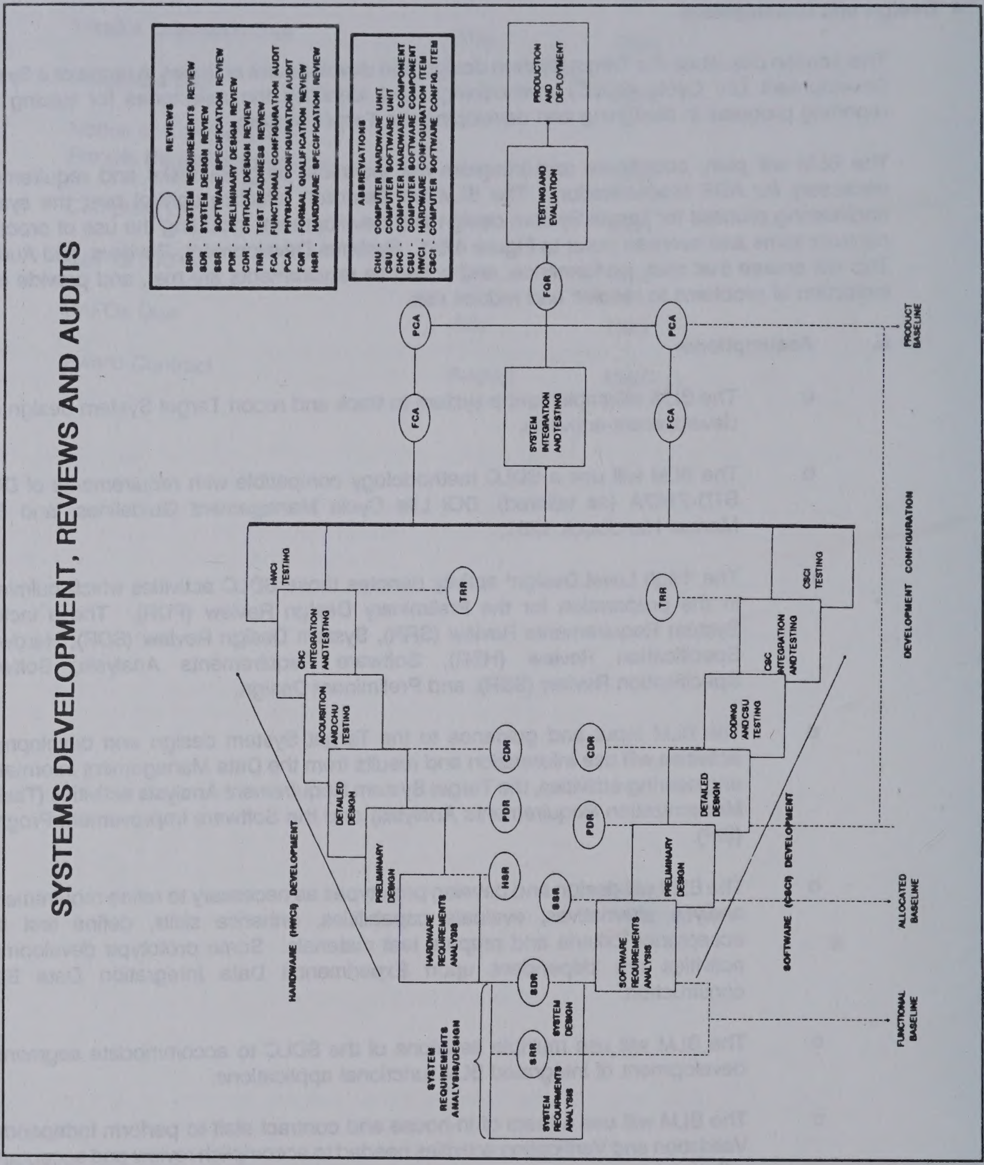

SYSTEMS DEVELOPMENT, REVIEWS AND AUDITS
REVIEWS
SRR - SYSTEM REQUIREMENTS REVIEW
SDR - SYSTEM DESIGN REVIEW
SSR - SOFTWARE SPECIFICATION REVIEW
PDR - PRELIMINARY DESIGN REVIEW
CDR - CRITICAL DESIGN REVIEW
TRR - TEST READINESS REVIEW
FCA - FUNCTIONAL CONFIGURATION AUDIT
PCA - PHYSICAL CONFIGURATION AUDIT
FQR - FORMAL QUALIFICATION REVIEW
HSR - HARDWARE SPECIFICATION REVIEW
ABBREVIATIONS
CHU - COMPUTER HARDWARE UNIT
CSU - COMPUTER SOFTWARE UNIT
CHC - COMPUTER HARDWARE COMPONENT
CSU - COMPUTER SOFTWARE COMPONENT
HWCI - HARDWARE CONFIGURATION ITEM
CSCI - COMPUTER SOFTWARE CONFIG. ITEM
HARDWARE (HWCI) DEVELOPMENT
SYSTEM REQUIREMENTS ANALYSIS/DESIGN
HARDWARE REQUIREMENTS ANALYSIS
PRELIMINARY DESIGN
DETAILED DESIGN
ACQUISITION AND CHU TESTING
CHC INTEGRATION AND TESTING
HWCI TESTING
TRR
HSR
PDR
CDR
SRR
SDR
SSR
SYSTEM REQUIRMENTS ANALYSIS
SYSTEM DESIGN
SOFTWARE REQUIREMENTS ANALYSIS
PRELIMINARY DESIGN
DETAILED DESIGN
CODING AND CSU TESTING
CSC INTEGRATION AND TESTING
CSCI TESTING
PDR
CDR
TRR
SOFTWARE (CSCI) DEVELOPMENT
FCA
PCA
SYSTEM INTEGRATION AND TESTING
FQR
TESTING AND EVALUATION
PRODUCTION AND DEPLOYMENT
FCA
PCA
FUNCTIONAL BASELINE
ALLOCATED BASELINE
DEVELOPMENT CONFIGURATION
PRODUCT BASELINE

Figure 4.0-1. Systems Development, Reviews, and Audits

4.1 System Design and Development Prototyping

Task Manager: E. Strand SC-314

The purpose of the Prototyping activity within the System Development Life Cycle is to ensure that initial Target System concepts and requirements such as Computer Human Interface, spatial data base design, and computer aided instruction are technically feasible, clearly defined, suitable for evaluation, capable of implementation, and satisfy user needs and/or expectations. New Target System concepts and requirements can be derived from either additional functional needs which lend to prototyping new technology to fulfil that need or from new technology itself. Prototyping supports the iterative application of the SDLC to each of the BLM functional areas.

The prototype tasks are performed by BLM with contractor support as needed.

A. Assumptions-

- The BLM will design and develop prototypes as necessary to refine requirements, analyze alternatives, evaluate capabilities, enhance skills, define test and acceptance criteria and prepare test materials. Some prototype development activities are dependent upon experimental data base construction.
- The design prototyping activities will consider the Interim development and experiences (see Technology Section 7.0, Software Development) and data preparation experiences (see Data Management 6.0, Data Preparation).

B. Policy Considerations-

- BLM will determine which, if any, Interim design considerations/requirements will be imposed on the Target System Design and Development.

Computer Human Interface

The development of the Target System and the Interim Land Information System requires the development of well defined requirements for a "user friendly" Computer Human Interface. Information organization and presentation concepts will be explored by BLM and evaluated by representative BLM users to determine requirements for an acceptable user interface. This activity will be coordinated with the People and Organization Section of this Master Plan.

Graphical User Interface Development Tools

The Target System requires the use of standards within the application software environment to support capabilities needed to develop a high level Graphical User Interface (GUI). These GUI development tools must satisfy the functional requirements of the Computer Human Interface and have significant impact on the portable implementation of application software across a common platform or system environment.

Experimental Data Integration Data Base

The design/enhancement of prototype spatial data bases, with relationships to ALMRS, GCDB, ARD and RDB, will be coordinated with the Division of Data Management.

These efforts will help BLM evaluate additional specifications for data collection, evaluate new requirements for data element standardization, further assess technical feasibility of implementing algorithms for manipulating spatial data, build in additional Target System functional requirements for spatial processing, and provide performance measures for data base processing on Target System platforms.

Data element definitions, data element relationships, data standards and data attributes for the minimum set of data elements, required by ALMRS to directly support plat graphics, by the Division of Data Management (see Data Chapter, Experimental Data Integration Data Base, Section 6.1).

The Data Base will be ported to the Target System platform and tool set. The data will include the data originally collected and, as well as, additional data from difference geographical areas necessary to enhance the testing/demonstration of the required spatial processing and functional requirements.

Context Sensitive Help and Tutorials

The user needs for the Target System include providing help and instruction to both novice and experienced users. Many technologies exist that could be used in meeting some or all of these requirements. Rapid prototyping of context sensitive help and tutorials will enable BLM to clearly define and provide examples of the capabilities needed to effectively support the necessary skill development and user needs which will be placed on the Target System.

Prototype New Technology

The Target System will require from time to time the need to prototype new technology. This need will surface from newly developed technology presented as a solution or from upgrades to current hardware or software.

Prototype New Technology Driven from Functional Requirements

Prototyping could also be initiated from additional functional needs. In this case, new or current technology is prototyped to fulfil that functional need. Prototyping driven from functional requirements will involve access to data prepared for this need.

4.2 System Development Life Cycle

Task Manager: E. Strand SC-314

The SDLC for the Target System will include multiple iterations of specific phases for each BLM functional area; Administrative Services, Land and Mineral Management, Resource Management, and Technical Services. These iterations will begin after the High Level Design activity and will accommodate the segmented, but integrated, development of BLM applications. Additional information from Section 2 of the Master Plan will be input to the SDLC tasks. Section 2 documents will be developed by BLM before award.

The 4.2 tasks will be performed by the contractor with BLM management, oversight and technical direction BLM is the source of the any and all approvals/acceptance (refer to Figure 4.2-1., Deliverable Products, Reviews, Audits, and Baselines).

The following sections, with bold titles, chronologically describe key SDLC developmental activities. The items covered represent a merging of three categories of activities:

Category of Activity	Tasks/Documents/Reviews/Certifications
Management and Evaluation	All Reviews, Testing and Configuration Audits.
Product Development	All Design, Analysis, Coding and Testing tasks with associated documentation and other deliverables.
Design Document Control	The three baseline document sets (Functional, Allocated and Product), and a Corrective Action Process (Change Control) for all design materials and contract deliverables.

A. Assumptions-

- This activity will be coordinated with the Data and People and Organization chapters of the Master Plan.
- System Requirements Analysis and Design activities, including reviews, will be performed for all four BLM functional areas; Administrative Services, Land and Mineral Management, Resource Management, and Technical Services.
- The Software Requirements Analysis activity will be performed for all four BLM functional areas; Administrative Services, Land and Mineral Management, Resource Management, and Technical Services.
- The Preliminary Design activity will be performed for all four BLM functional areas; Administrative Services, Land and Mineral Management, Resource Management, and Technical Services. The Preliminary Design will be refined for Resource Management and Technical Services after implementation of Administrative Services and Land and Mineral Management applications.

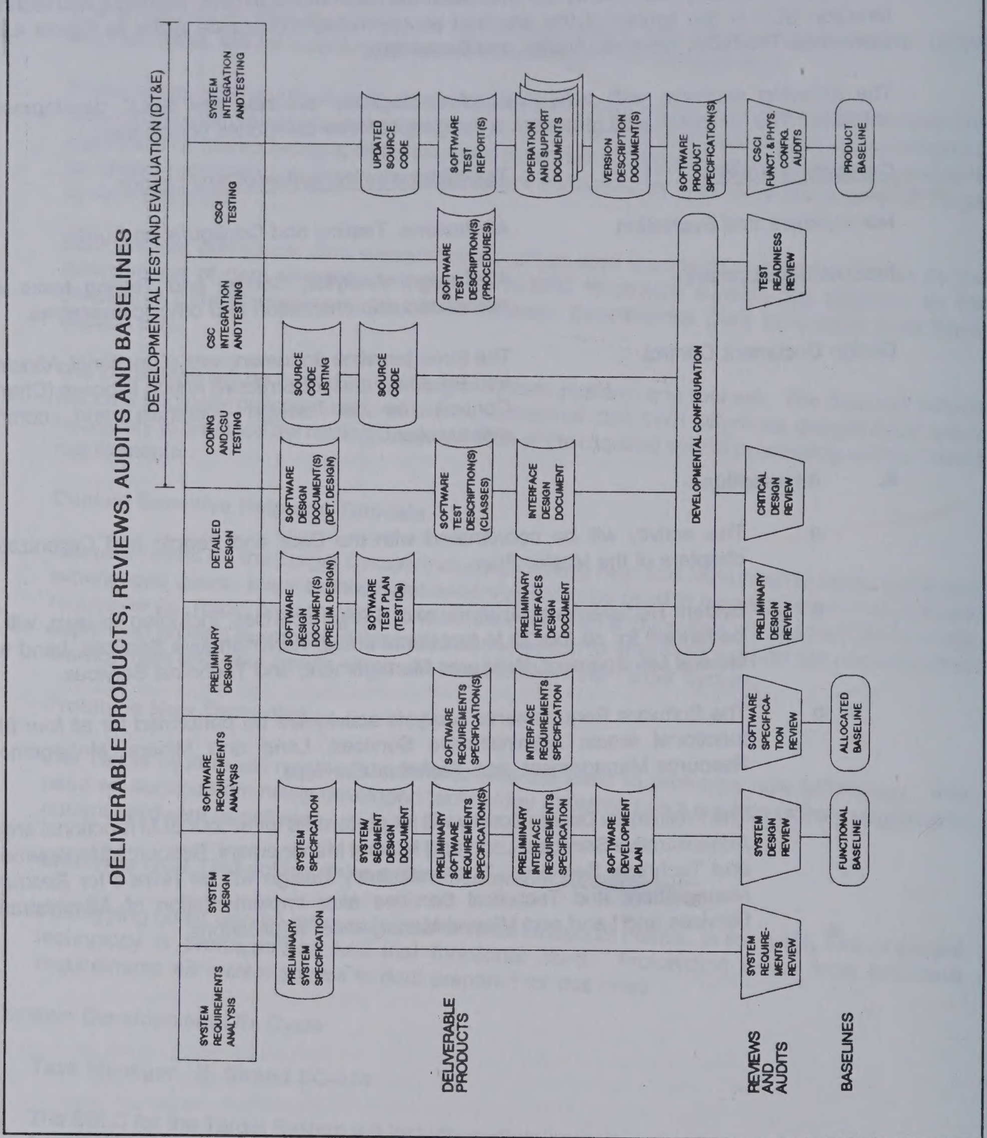

DELIVERABLE PRODUCTS, REVIEWS, AUDITS AND BASELINES
DEVELOPMENTAL TEST AND EVALUATION (DT&E)
SYSTEM REQUIREMENTS ANALYSIS
SYSTEM DESIGN
SOFTWARE REQUIREMENTS ANALYSIS
PRELIMINARY DESIGN
DETAILED DESIGN
CODING AND CSU TESTING
CSC INTEGRATION AND TESTING
CSCI TESTING
SYSTEM INTEGRATION AND TESTING
DELIVERABLE PRODUCTS
PRELIMINARY SYSTEM SPECIFICATION
SYSTEM SPECIFICATION
SYSTEM/ SEGMENT DESIGN DOCUMENT
PRELIMINARY SOFTWARE REQUIREMENTS SPECIFICATION(S)
PRELIMINARY INTERFACE REQUIREMENTS SPECIFICATION
SOFTWARE DEVELOPMENT PLAN
SOFTWARE REQUIREMENTS SPECIFICATION(S)
INTERFACE REQUIREMENTS SPECIFICATION
SOFTWARE DESIGN DOCUMENT(S) (PRELIM. DESIGN)
SOTWARE TEST PLAN (TEST IDs)
PRELIMINARY INTERFACES DESIGN DOCUMENT
SOFTWARE DESIGN DOCUMENT(S) (DET. DESIGN)
SOFTWARE TEST DESCRIPTION(S) (CLASSES)
INTERFACE DESIGN DOCUMENT
SOURCE CODE LISTING
SOURCE CODE
SOFTWARE TEST DESCRIPTION(S) (PROCEDURES)
UPDATED SOURCE CODE
SOFTWARE TEST REPORT(S)
OPERATION AND SUPPORT DOCUMENTS
VERSION DESCRIPTION DOCUMENT(S)
SOFTWARE PRODUCT SPECIFICATION(S)
DEVELOPMENTAL CONFIGURATION
REVIEWS AND AUDITS
SYSTEM REQUIRE-MENTS REVIEW
SYSTEM DESIGN REVIEW
SOFTWARE SPECIFICA-TION REVIEW
PRELIMINARY DESIGN REVIEW
CRITICAL DESIGN REVIEW
TEST READINESS REVIEW
CSCI FUNCT. & PHYS. CONFIG. AUDITS
BASELINES
FUNCTIONAL BASELINE
ALLOCATED BASELINE
PRODUCT BASELINE

Figure 4.2-1. Deliverable Products, Reviews, Audits, and Baselines

- The Detailed Design activity will be performed for Land and Mineral Management and any new Administrative Services requirements. The Detailed Design activity will be performed for Resource Management and Technical Services after implementation of Administrative Services and Land and Mineral Management applications.
- The Coding and CSU Testing activity will be performed for Land and Mineral Management and any new Administrative Services requirements. Existing SIP application software will be converted and/or re-implemented for current Administrative Services requirements. The Coding and CSU Testing activity will be performed for Resource Management and Technical Services after implementation of Administrative Services and Land and Mineral Management applications.
- The CSC Integration and Testing activity will be performed for Administrative Services and Land Mineral Management application software. The CSC Integration and Testing activity will be performed for Resource Management and Technical Services applications after implementation of Administrative Services and Land and Mineral Management applications.
- The CSCI Testing activity will be performed for Administrative Services and Land and Mineral Management requirements. The CSCI Testing activity will be performed for Resource Management and Technical Services after implementation of Administrative Services and Land and Mineral Management applications.
- The System Integration and Testing activity will be performed for Administrative Services and Land and Mineral Management requirements. The System Integration and Testing activity will be performed for Resource Management and Technical Services after implementation of Administrative Services and Land and Mineral Management applications.

B. Policy Considerations-

- An appropriate and detailed Life Cycle Management (LCM) methodology will be selected, rehearsed, and tailored to the needs of the BLM Modernization Project before contract award. Develop an appropriate interface to support the necessary reports described in the DOI Life Cycle Management Guidelines document (e.g. System Decision Papers).

System Requirements Analysis/Design

The purpose of the System Requirements Analysis and System Design is to completely define and analyze the requirements of the Target System. These requirements include the functions the system will be required to accomplish, its functional interfaces, and necessary system design constraints. During this phase, analyses and trade-off studies are performed, and prototypes are developed to further define requirements. Traceability to functional and other requirements of the contract are established and documented. The results of this phase are documented and approved requirements for the functional baseline for the system.

System Requirements Review (SRR)

The purpose of the SRR is to evaluate and approve the Preliminary System Specification (the documented requirements of the system). The approved documents shall be placed in the contractor's configuration control.

System Design Review (SDR)

The purpose of the SDR is to evaluate and approve the optimization, traceability, correlation, completeness and the risk of allocated requirements, including the corresponding test requirements. The functional baseline of the Target System is defined at this point. The approved baseline is placed under BLM Configuration Control.

Software Requirements Analysis

The purpose of the Software Requirements Analysis is to completely define and analyze the requirements of the software. These requirements include the functions the software is required to accomplish as part of the system, the functional interfaces, and the necessary design constraints. During this phase, analyses and trade-off studies are performed, and requirements are made definitive. Functional requirements are allocated to software requirements and traceability to system requirements is established and documented. The results of this phase are documented and approved requirements for the software.

The Contractor will define and analyze a complete set of functional, performance, interface, and qualification requirements for each Computer Software Configuration Item (CSCI). These requirements will be derived from the system requirements as defined in the System/Segment Specification (SSS) or other sources specified in the contract. Additional requirements may be derived during the analysis and allocation of system-derived requirements.

The Software Requirements Analysis activity will include an analysis of Software Improvement Program (SIP, see Technology Chapter) results to provide the basis for the Contractor to develop the Transition Strategy for converting and/or re-implementing the functional capabilities of the existing SIP application software which supports the Administrative Services functional area. This will also produce modifications to the SIP Interface with the other functional areas.

Software Specification Reviews (SSRs)

The purpose of the SSRs is to demonstrate to the BLM that all the system level software requirements have been allocated to the various CSCIs. The Allocated Baseline for the Target System is defined at this point. The approved documentation shall be placed in the Contractor's Configuration Control and under the BLM is Configuration Control.

Hardware Specification Review (HSR)

For the Target System Acquisition, hardware components and interface standards will have been determined at Contract Award. The purpose of the HSR is to identify impacts and propose changes to the hardware support environment that come about from an Engineering Change Order.

Preliminary Design

The purpose of the Preliminary Design activity is to develop a design approach which includes mathematical models, functional flows, data flows and data dictionary. During this phase, various design approaches are considered, analysis and trade-off studies are performed, and design approaches selected. For the top level Computer Software Configurations (CSCs), Preliminary Design allocates software requirements to CSCs, describes the processing that takes place within each CSC, and establishes the interface relationship between CSCs. Design of critical lower-level elements of each CSCI may also be performed. Traceability to software requirements is established. The result of this phase is a documented and approved Preliminary Design of the software. The Preliminary Design is reviewed against the requirements prior to initiating the detailed design.

The Contractor will develop a top-level design of each CSCI, including the logical design of the data base, which completely reflects the requirements specified in the Software Requirements Specification (SRS) and Interface Requirements Specifications (IRS). The Contractor may develop lower-level design for critical elements of the CSCI.

The Preliminary Design activity will include the development of the Transition Strategy for converting and/or re-implementing the functional capabilities of the SIP application software which supports the Administrative Services functional area. The Transition Strategy will be reviewed and approved concurrent with the Preliminary Design Review.

Preliminary Design Review (PDR)

The purpose of the PDR is to evaluate the progress, technical adequacy, and risk resolution of the selected design approach for each Hardware Configuration Item (HWCI) and CSCI (including interfaces) and to evaluate the compatibility of the design with the requirements of the system specification. A PDR will be held for each HWCI, CSCI, or aggregate of HWCIs or CSCIs, identified in the specification tree. The Contractor will have applicable engineering data, specifications, drawings, manuals, schematics, design and test plans, and the results of analyses available at each PDR. The approved items shall be placed in the Contractor's configuration control.

Detail Design

The purpose of the Detailed Design is to refine the approved design approach and provide detailed design documents (reviewed against the requirements and top-level design) prior to initiating the coding phase.

The Contractor will develop a complete, modular, detailed design for each CSCI down to the Computer Software Unit (CSU) level of detail. This includes a detailed data base design consisting of data base management system overview, data base structure, data base physical design, and data base references.

Critical Design Reviews (CDRs)

The purpose of the CDR is to evaluate the progress, technical adequacy, and risk resolution of the selected detailed design for each HWCI and CSCI, and to evaluate the compatibility of the detailed design with the requirements of the system specification. A CDR will be held for each HWCI, CSCI, or aggregate of HWCIs or CSCIs, identified in the specification tree. The Contractor will have applicable engineering data specifications, drawings, manuals, schematics, design and test procedures, and the results of studies and analyses available at each CDR. The approved items shall be placed in the Contractor's configuration control.

Coding and Computer Software Unit (CSU) Testing

The purpose of Coding and CSU Testing is to code and test each CSU described in the detailed design documentation. Each CSU is reviewed for compliance with the corresponding detailed design description and applicable coding standards prior to establishing configuration control of the CSU and releasing it for integration.

The Contractor will code and test each CSU specified in the approved detailed design.

Computer Software Component (CSC) Integration and Testing

The purpose of the CSC integration and testing is to integrate and test logical aggregates of coded CSUs. Integration tests should be performed based on documented integration test plans, test descriptions, and test procedures. CSC integration test results, and CSCI test plans, descriptions, and procedures for testing the fully implemented software are reviewed prior to the next phase of testing.

The Contractor will integrate CSUs entered into the Developmental Configuration (including software and associated documentation) and perform informal tests on aggregates of integrated CSUs.

Test Readiness Reviews (TRRs)

The Contractor will hold a TRR prior to the start of the formal CSCI testing. The Contractor will brief BLM on the updated Software Test Procedure and review the results of informal testing at the TRR. The Contractor will demonstrate the adequacy of the Software Test Procedure.

Computer Software Configuration Item (CSCI) Testing

The purpose of the CSCI testing is for the Contractor to test the fully implemented CSCIs. Testing during this phase concentrates on showing that the software satisfies its specified requirements. Test results should be reviewed to determine whether the software satisfies its specified requirements. Functional and Physical Configuration Audits are performed. The Product Baseline for the Target System is defined at this point. The approved Product Baseline will be placed under BLM Configuration Control.

System Integration and (Formal) Testing

The purpose of system integration and testing is to assemble and integrate all hardware and software configuration items into a complete system and to conduct formal testing of the integrated system. Functional and Physical Configuration Audits are performed.

The Contractor will perform the technical and functional activities required to assemble and integrate the HWCIs and CSCIs to form the System. The Contractor will perform implant HWCI/CCSCS integration tests and will document test plans and procedures for the integration tests in accordance with Task 13, "Target System Test and Evaluation".

Task Title: 4.1 Design and Development Prototyping April, 1990

Task Manager: E. Strand SC-314

Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
4.1.1	Prototype Computer Human Interface	Money	BLM	4/90	10/91	Coord. to People and Organization 2 & 3; Coord. to Technology 2.3 & 2.4; Coord. to Data 1.6 & 1.8	Iterative Dev Plan	Deliverables Accepted	Repetition of this step for the Resources Mission Area is contingent on the issuance of the corresponding task order (e.g., Jan 93-May 93).
4.1.2	Prototype Graphical User Interface Development Tools	Money	BLM	5/91	10/91	Contract Award; Coord. to Technology 2.3 & 2.4; Coord. to Data 1.6 & 1.8; Coord. to Data 3, 4, 5, & 6	Style Guide	Deliverables Accepted	Repetition of this step for the Resources Mission Area is contingent on the issuance of the corresponding task order (e.g., Jan 93 - May 93).
4.1.3	Prototype Experimental Data Integration Data Base	Money Leopold	BLM	2/90	10/91	Coord. to People and Organization 2, 3, & 4; Coord. to Data 3, 4, 5, & 6	Written Findings	Deliverables Accepted	Repetition of this step for the Resources Mission Area is contingent on the issuance of the corresponding task order (e.g., Jan 93 - May 93).
4.1.4	Prototype Context Sensitive Help and Tutorials	Money	BLM	4/90	10/91	Coord. to People and Organization 2 & 3	Written Findings	Deliverables Accepted	Repetition of this step for the Resources Mission Area is contingent on the issuance of the corresponding task order (e.g., Jan 93 - May 93).

Task Title: 4.1 Design and Development Prototyping

Task Manager: E. Strand SC-314

Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
4.1.5	Prototype New Technology	Money	BLM			Coord. to People and Organization 2, 3, &4	Written Findings	Deliverables Accepted	This step is contingent on new technology presented for prototyping.
4.1.6	Prototype New Technology Driven from Functional Requirements	Money	BLM			Coord. to People and Organization 2, 3, & 4; Coord. to Data 3, 4, 5 & 6	Written Findings	Deliverables Accepted	This step is contingent on new functional requirements presented for prototyping applicable new technology.

Task Title: 4.2 System Design for Life Cycle

April, 1990

Task Manager: E. Strand SC-314

Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
4.2.1	System Requirements Analysis/Design	Money	BLM, Contractor	5/91	6/91	Contract Award	Review/ Analysis Materials	Deliverables Accepted	The schedule assumes that Contract Award occurs during 5/91. This action encompasses the Total System scope.
4.2.1.1	System Requirements Review (SRR)	Money	BLM, Contractor	6/91	7/01	Task 4.2.1	Approved Review Docs	BLM Approvals Provided	This action encompasses the Total System scope.
4.2.1.2	System Design Review (SDR)	Money	BLM, Contractor	7/91	7/91	Task 4.2.1.1	BLM Review Approvals	BLM Approvals Provided	This action encompasses the Total System scope.
4.2.2	Software Requirements Analysis	Money	BLM, Contractor	7/91	8/91	Task 4.2.1.2	Analysis Materials	Deliverables Accepted	This action encompasses the Total System scope.
4.2.2.1	Software Specification Reviews (SSRs)	Money	BLM, Contractor	8/91	9/91	Task 4.2.2	BLM Review Approvals	BLM Approvals Provided	This action encompasses the Total System scope.
4.2.3	Hardware Specification Review (HSR)	Money	BLM, Contractor	7/91	9/91	Task 4.2.1.2	BLM Review Approvals	BLM Approvals Provided	This action encompasses the Total System scope.
4.2.4	Preliminary Design	Money	BLM, Contractor	6/91	10/91	Task 4.2.2.1 and 4.2.3	Design Materials	Deliverables Accepted	The Preliminary Design will be reopened with the undertaking of major subsequent development (e.g., Resources & Technical Services, Jan 93 - Apr 93).

Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
4.2.4.1	Preliminary Design Review (PDR)	Money	BLM, Contractor	10/91	10/91	Task 4.2.4	BLM Review Approvals	BLM Approvals Provided	With the undertaking of major subsequent development (e.g., Resources & Technical Services, Apr 93), the PDR will again close the preliminary Design (see 4.2.3 above).
4.2.5	Detail Design	Money	BLM, Contractor	10/91	11/92	Task 4.2.4.1	Design Materials	Deliverables Accepted	The Detail Design will be reopened with the undertaking of major subsequent development (e.g., Resources & Technical Services, Apr 94 - Dec 94).
4.2.5.1	Critical Design Reviews (CDRs)	Money	BLM, Contractor	11/92	11/92	Task 4.2.5	BLM Review Approvals	BLM Approvals Provided	With the undertaking of major subsequent development (e.g., Resources & Technical Services, Dec 94), the CDR will again close the Preliminary Design (see 4.2.4 above).
4.2.6	Coding and Computer Software Unit (CSU) Testing	Money	BLM, Contractor	8/92	8/93	Task 4.2.5.1	Tested CSUs & Doc	Deliverables Accepted	Coding and CSU Testing will be reopened with the undertaking of major subsequent development (e.g., Resources & Technical Services, Oct 94 - Oct 95).

Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
4.2.7	Computer Software Component (CSC) Integration and Testing	Money	BLM, Contractor	6/93	8/93	Task 4.2.6	Tested CSCs & Doc	Deliverables Accepted	CSC Integration and Testing will be reopened with the undertaking of major subsequent development (e.g., Resources & Technical Services, Aug 95 - Oct 95).
4.2.7.1	Test Readiness Reviews (TRRs)	Money	BLM, Contractor	8/93	8/93	Task 4.2.7	BLM Testing Approvals	BLM Approvals Provided	With the undertaking of major subsequent development (e.g., Resources & Technical Services, Oct 95), the TRR will again close the Preliminary Design (see 4.2.4 above).
4.2.8	Computer Software Configuration Item (CSCI) Testing	Money	BLM, Contractor	8/93	8/93	Task 4.2.7.1	Tested CSCIs & Doc.	Deliverables Accepted	CSCI Testing will be reopened with the undertaking of major subsequent development (e.g., Resources & Technical Services, Oct 95).
4.2.9	System Integration and (Formal) Testing	Money	BLM, Contractor	8/93	8/93	Task 4.2.8	Complete Code & Doc	Deliverables Accepted	System Integration and (Formal) Testing will be reopened with the undertaking of major subsequent development (e.g., Resources & Technical Services, Oct 95).

5 Facilities Preparation

This section identifies the activities, procedures, and strategies for preparing designated BLM sites for Target System installation.

Facilities, as defined by the BLM, include the permanent or semipermanent real property assets required to support the Target System. Factors to be considered in facilities preparation include physical space, access, facility improvements, environmental requirements, safety, power, and equipment.

A. Assumptions-

- Adequate drawings will be provided to the Contractor.
- Development of charter is coordinated between SC and WO.
- Chartering is accomplished by the IRMAC.
- There are sufficient number of trained facilitators to support review teams, at least one month prior to the formation of the first formal Review Team in Action Step 5.1.21 (see Action Plans for 5).
- SC-673 has sufficient staff and availability to develop standards for Floorplans and associated Facilities Preparation Inventory Datasheets.
- SC-140 is available to prepare training videos for facilities preparation.
- All planning groups have staff committed for respective activity lifetimes.
- Minimum number of redline changes to Floorplans and Facilities Preparation Inventory Datasheets.
- Minimum number of engineering drawings required.
- Minimum number of additional site visits.
- Clerical and editorial support is guaranteed for the Review Teams.
- Logistical support is available for field office support.
- Review personnel for formal reviews are not the same people who wrote the product being reviewed.
- Review and production of Final Review Report (FRR) is accomplished in less than 30 days.
- Reviews follow procedures outlined in the draft Document Management Policy, 3/27/89.
- All team or staff functional designations are accomplished using formal, written memoranda.

- Facilities Preparation planning for Pilot efforts (e.g., Administrative Services, Land and Mineral Management, Resource Management, Technical Services) are complete before migrating planning outside of Pilot.

- Approvals of Site Preparation and Installation Plans (SPIPs) occur within 20 days of receipt.

- WO designates Pilot Site Managers and State Directors designate Non-Pilot Site Managers.

- The Facilities Planning Group is formed and functioning prior to SPIP generation.

- The Facilities Planning Group's tenure begins prior to Pilot and includes Non-Pilot Facilities Preparation and Installation activities.

- AutoCad workstations are available to support engineering staff developing site floorplans.

- Engineering technicians are available to produce site floorplans using the AutoCad workstations.

- Additional professional engineering expertise in the disciplines of structural, mechanical, and electrical engineering is hired to support the formal review of plans and other facilities preparation products.

- The technicians and engineering professionals can be hired as temporary, 2-5 year appointments.

- Additional travel funding is available to support additional engineering professionals in their identification of the more complex data (i.e., data found in State Offices or in Federal buildings) required for collection for the Facilities Preparation Inventory Datasheets.

- Facilities will have to be engineered in order to support parallel operation of the Target System along with in-place and/or Interim systems (i.e., public room operations and developmental public room activities).

B. Policy Considerations-

- Define the technical scope of the Target System Acquisition, i.e., Does the Target System Acquisition embody aspects of Administrative Services? Office Automation? Land and Mineral Management? Resource Management? GIS? Technical Services?, or any combination of the same mentioned above?

- Need a policy decision authorizing a Bureauwide Public Room user survey to develop a Bureau Public Room User Profile.

- Need a policy decision identifying the level of external support that the technical scope of the Target System Acquisition will provide, i.e., Does Target provide system nodes to Forest Service? USGS? local governments? state governments? private industry?

- Establish SC-651C and SC-673 as the units responsible for preparing Floorplans and consolidating Facilities Preparation Inventory Datasheets.
- Establish SC-310/652B as responsible unit for presenting Floorplans and consolidated Facilities Preparation Inventory Datasheets to the Target Contractor.
- Establish that all decisions on reviews in support of Master Plan **Action Steps** are Formal Decisions of Acceptance/Rejection rendered in a timely (less than 1 week from receipt) fashion. Use as a basis for this establishment, the draft Document Management Policy dated March 27, 1989, produced by SC-310.
- Need a policy decision confirming whether BLM or Contractor is responsible for making SPIP-identified site modifications.
- Need to establish an appropriate policy statement that the Target System Contractor(s) shall be responsible for complying with the Department of the Interior ADP Standards Handbook (306 DM), ADP Security Program dated May 19, 1980.
- Need to develop a policy statement that identified the procedures necessary and the associated fiscal responsibilities (including budget allocation, etc.) that BLM Field offices might incur related to a Facilities Preparation contingency where the BLM exercises an option to contract independently or perform facilities modifications rather than require the Target System Contractor to perform such modifications.

5.1 Site Preparation Planning

Task Manager: M. Kirby SC-311

The Service Center Division of Modernization, in cooperation with the Washington and State Offices, other Service Center units, BIFC and the Target System Contractor(s), will plan, manage and/or coordinate facility preparation activities.

Provisions will be made for the concurrent installation and parallel operation of the Target System along with in-place and/or Interim systems.

Floorplans

Site Managers of sites with existing computer rooms (identified as such by having enhanced heating, ventilation, air conditioning, raised flooring, etc., that support the computer processing unit) designated to receive the Target System will provide up-to-date Floorplans of their facilities to their appropriate State Office, Washington Office, or BIFC Site Managers.

Site Managers of sites where ADP equipment operates in an office environment will provide up-to-date floorplans of all rooms within each facility where such equipment resides. If the office environment is supported by, for example, a telecommunications "backbone" which exists in or throughout the facility in rooms other than in the room in which the ADP equipment resides, floorplans showing those other rooms are to be provided by the Site Managers as well.

These Site Managers are responsible for delivering this information to the SC System Installation Manager not later than TBD prior to RFP award.

Assistance for conducting these activities will be provided by various Divisions at the Service Center, coordinated through the SC System Installation Manager. For example, engineering standards for the preparation of these Floorplans will be provided by the SC Branch of Building Engineering (SC-673) TBD before RFP award, and verified by the Real Property and Space Acquisitions Section of the Branch of Procurement (SC-651C) of the Service Center TBD before RFP award. Policies, guidance and a link to the Bureau's AWP process for achieving activity objectives will be coordinated through the WO System Installation Manager.

Five working days after Contract award, SC-311 will provide to the Contractor Floorplans and associated Facilities Preparation Inventory Datasheets of BLM sites. The Contractor(s) shall use these Floorplans and the Datasheets in the preparation of the Contractor(s) Site Preparation Installation Plans (SPIPs).

Facilities Inventory Data

The following information for each site will be collected on Facilities Preparation Inventory Datasheets:

- Name, address, city, state, and zip code of the building(s) that will house the Target System
- Are multiple buildings involved? If yes, give the identification scheme used to refer to each building (i.e., Building 2, Montoya Federal Building, North Building, etc.)
- Is the building GSA-leased, BLM-leased, GSA-owned, or BLM owned?
- If leased, what is the name, address, and telephone number of the lessor?
- If leased, who is the COR?
- If leased, what is the lease expiration date?
- Does the indicated building(s) have multiple floors? If yes, does BLM occupy all space on each floor? Explain in detail.
- Do BLM and Forest Service share space in the same building(s)?
- Do BLM or Forest Service maintain public rooms within the building(s)?
- Do BLM and some other government agency share space in the same building(s)?
- Do BLM and some other government agency maintain public rooms within the building(s)?
- Identify for each existing computer room in the building the following characteristics:
    - Room number and/or name
    - Room dimensions (i.e., length, width, height from ceiling to floor, square footage)

- Floor on which room is located
- Current room use
- Door sizes (height, width) and access clearances (interior opening, 4-foot clearance)
- Handicap access features
- Window number, locations, dimensions, and character (i.e., 2, north wall, 48"x 60", permanently sealed)
- Ceiling height and character (e.g., 8-foot dropped, composition panel or 8-foot hardcast, etc.)
- Wall character and location (i.e., exterior wall - north, flecked masonite finish, 2"x4" wood frame on 16-inch centers)
- Partition location and character (i.e., interior, slab-to-slab, gypsum wallboard finish, 2" x 4" metal frame on 24" centers)
- Raised floor? If yes, floor height and construction material; clearance and utilization (i.e., 28" raised composition flooring, 2" x 4" metal underframing with heating ductwork and telecommunications raceways collocated) and floorloading capacity.
- Floor covering? Static guard?
- Slab-on-grade?
- Fire protection system? (i.e., 48" ceiling grid water sprinkler system with 100° magnesium trip switch)
- HVAC unit description (i.e., 10 Ton)
- Existing power capabilities (i.e., 110V, 220V wired)
- Location and number of outlets (north partition, 3 110V outlets)
- Lighting characteristics (i.e., fluorescent ceiling, etc.)

SC-311 will provide to the Target System Contractor(s) consolidated Floorplans and Facilities Preparation Inventory Datasheets five working days after Contract award. These floorplans and Datasheets will be provided to assist the Contractor in the physical inspection and evaluation of selected sites to verify their as-built condition.

The BLM requires Contractor to visit:

a. All 12 State Offices;

b. Service Center, Building 53;

c. Washington Office, Main Interior Building;

d. Albuquerque District Office, and the collocated Rio Puerco Resource Area, New Mexico;

e. Taos Resource Area, New Mexico; and

f. Farmington Resource Area, New Mexico;

for the purpose of surveying these physical sites, meeting key BLM personnel, and verifying the BLM-furnished Floorplans and Facilities Preparation Inventory Datasheets.

Required site surveys shall be accomplished within 3 months from contract award.

The Contractor or SC-311 may request that site surveys be conducted at sites additional to those identified in a. - f. above, as required to facilitate the System installation process. These requests shall or will be made in writing to the Bureau's Contracting Officer.

Any additional site surveys shall be accomplished within a mutually agreeable time-frame.

The facilities engineering requirements of each site are addressed in Subchapter 5.4, Site Preparation and Installation Plan.

It is the responsibility of SC-311 to form Review Teams to examine the Contractor's redlined Floorplans and the accompanying Facilities Preparation Inventory Datasheets.

The SC-311 will review Contractor identified modifications (presented as Engineering Drawings) to sites containing computer/ADP room facilities required to accommodate Contractor's proposed system configuration(s). These Engineering Drawings (signed by a registered engineer for those sites) will be reviewed during a formal Review process.

5.2 Contractor Site Preparation and Installation Plan (SPIP) Review

Task Manager: L.J. Porter, SC-673

The results of the Contractor site survey evaluation are incorporated into a Site Preparation and Installation Plan (SPIP) for each designated site. SC-311 will convene a formal BLM Review Team to examine each SPIP in order to determine if the following content items have been addressed per contract specification:

a. The requirements for: heating, ventilation, and air conditioning (HVAC); electrical and lighting; plumbing; system monitoring and physical security; health, fire, and safety protection; flooring (design and other considerations such as raised floors, etc.); acoustics, telephone/communications, power conditioners;

b. Weekend (or off-peak) power, HVAC, and maintenance requirements;

c. Ceiling height, partitions, and structural capabilities;

d. Possible outside interference/radars/television/radio/microwave, vibration, grounding;

e. Physical access to the site, dimensions and capacities of the access ways, size, location, and environmental characteristics (e.g., air conditioning, dust, vulnerability to static electricity, maintenance access, etc.), ability of the physical site to accommodate equipment to be installed (including receiving and storage of the available space for the equipment scheduled to be placed at a site);

f. Secured storage of equipment and materials;

g. Physical space based on existing conditions, physical footprint of the new equipment proposed;

h. Access to communications media (e.g., FTS 2000 service delivery points and telephone wiring closets), availability of installed cables and cableways, availability of electrical power, availability of cooling water;

i. Any other restrictions on common installation methods, techniques, or materials due to compliance with local or State building codes or to building management (e.g., housekeeping during and after installation);

j. Installation Plans, including procedures, for all sites;

k. System installation activities (i.e., hardware, software, etc.) and Work Plans for accomplishing said activities (which identify the types of skills, personnel, etc.) with minimal impact on site operations;

l. A Site Installation Schedule that shall address all required installation activity at a site;

m. Work station placement and adjustment; and

n. Training and classroom facilities.

o. LAN and WAN wiring Installation Plans for all Bureau sites.

p. LAN and WAN Hardware and Software Installation Plans for all Bureau sites.

The BLM review will examine whether the Contractor utilized electrical (including uninterrupted power source if existing), plumbing, fire and safety, heating/cooling features of the existing site to the maximum extent possible (where those existing features supported local, Federal, nationally recognized building codes and standards applicable to each type of work being performed). SC-311 will review the extent to which the Contractor accommodated the physically handicapped in accordance with the "Uniform Federal Accessibility Standards," and will review Contractor(s) annotations to the Site Preparation and Installation Plan to depict the usage of existing site features.

Each SPIP will be formally reviewed by SC-311 at least 120 working days before each site's scheduled installation date.

5.3 SPIP Approval

Task Manager: M. Kirby SC-311

SC-311 will approve the Contractor SPIP prior to securing construction contracts for the modification of designated sites.

SC-311 will notify the Contractor of the approval/rejection of the SPIP within 20 working days after the formal Review of the SPIP.

5.4 Site Modification Activities

Task Manager: M. Kirby SC-311

The Contractor shall make all approved, SPIP-identified modifications unless BLM exercises an option to furnish services to make any or all approved modifications. The Division of Modernization will provide SPIPs to the Washington and State Offices, Service Center and BIFC at least four (4) months prior to the scheduled start of site installation to provide these offices with sufficient time to procure construction contracts for sites under their jurisdiction (if BLM exercises its option to furnish services to make any or all approved modifications).

It is the responsibility of BLM Site Managers to ensure that the LAN and WAN wiring is completed on an agreed upon date before the scheduled hardware installation.

Sites shall be modified by the Target System Contractor or by BLM-selected construction contractor(s) (if and only if BLM exercises this option) in accordance with the facility preparation requirements specified in the applicable SPIPs. Procurement of construction contractors and site preparation financial support will be the responsibility of the Washington and State Offices, Service Center and BIFC.

Site preparation activities will be performed in coordination with the Service Center Divisions of Administrative Services, Modernization and System Engineering.

5.5 Facility Inspection and Correction

Task Manager: M. Kirby SC-311

Upon completion of each site's Facilities Preparation activities, the BLM and the Target System Contractor shall jointly inspect each facility to determine site readiness for system installation. Discrepancies will be corrected by the Target System Contractor or, if optionally exercised, by BLM before certifying the site for system installation.

Unacceptable site readiness conditions will be corrected by BLM or its agent, if and only if BLM makes the modifications, otherwise the Contractor shall carry out required corrections under the provisions of the Target System Acquisition contract. Corrections shall be documented in an attachment to the SPIP by the appropriate organization in accordance with BLM Document Management guidelines or contract provisions.

SC-311 will ensure that all facilities where BLM effects the corrections meet the requirements of the Target System Contract Statement of Work (SOW), applicable system environmental specifications, and Federal, State and Local regulations and/or building codes. The BLM will review Contractor performance to ensure that all facility requirements are met in accordance with the System environmental specifications and Federal, State, and local legislation and/or codes where Contractor(s) effect the corrections.

Certification of Site Readiness

The Contractor shall transmit to SC-311 a written certification of site readiness for installation in the Certification of Site Readiness attachment to the SPIP for each site.

5.6 Installation Authorization

Task Manager: B. Beierle SC-652B

Within five days of receiving the Contractor's Certification of Site Readiness, the CO will authorize the Contractor to install the approved Target System configuration at the designated site, and provide the Contractor with the date of System installation.

Task Title: 5.1 Facilities Preparation Planning

Task Manager: M. Kirby SC-311

Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
5.1.1	Write draft System Installation Manager Position Description (PD)	Barrell		11-89	11-89	P O2: T2, 3, 7, 8 D M 1, 2, 4, 6-8	Draft PD	Sent to 5.1.2 review	
5.1.2	Review draft System Installation Manager PD	Hofman	Herrington, Sedbrook	2-90	3-90	5.1.1	Reviewed Draft PD	Sent to Barrell	
5.1.3	Submit draft System Installation Manager PD to Personnel for classification	Barrell		3-90	5-90	5.1.2	Reviewed Draft PD for Classification	Sent to Personnel	
5.1.4	Approve System Installation Manager PD	Murphey	Personnelist(s)	5-90	5-90	5.1.3	Classified PD	Classified PD Sent to Barrell	
5.1.5	Write draft Site Manager PD	Barrell		2-90	2-90	5.1.1	Draft PD	Sent to 5.1.6 review	
5.1.6	Review draft Site Manager PD	Hofman	Herrington, Sedbrook Harne (UT)	3-90	3-90	5.1.5	Reviewed Draft PD	Sent to Barrell	
5.1.7	Submit draft Site Manager PD to Personnel for Classification	Barrell		3-90	5-90	5.1.6	Reviewed draft PD for classification	Sent to Personnel	
5.1.8	Approve Site Manager PD	Murphey	Personnelist(s)	5-90	5-90	5.1.7	Classified PD	Classified PD sent to Barrell	
5.1.9	Designate WO System Installation Manager	Webber	Anderson (WO)	6-90	6-90	5.1.4	Formal memo	Memo issued	
5.1.10	Designate SC System Installation Manager	Conn	Money	6-90	6-90	5.1.4	Formal memo	Memo issued	

Task Title: 5.1 Facilities Preparation Planning

April, 1990

Task Manager: M. Kirby SC-311

	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
5.1.11	Designate Pilot Site Managers	Woodard	Conn Dwyer (NM Pilot) Anderson (WO)	6-90	6-90	5.1.8	Formal memo	Memo issued	
5.1.12	Designate Site (SO) Managers	SDs		6-90	6-90	5.1.8	Formal memo	Memo issued	
5.1.13	Make policy decision identifying BLM or Target System Contractor as responsible for making Site Preparation and Installation Plan (SPIP) - identified site modifications	Moeller		2-90	4-90		Formal memo	Memo issued	
5.1.14	Develop "in-reach" video to communicate the process of Floorplan and Datasheet collection and preparation	Gaylord	SC-140, SC-311, SC-673, SC-651C	2-90	6-90	5.1.9, 5.1.10, 5.1.11, 5.1.12	Video	Video distributed	
5.1.15	Make policy decision establishing Facilities Preparation Working Group	Leopold		1-90	2-90		Formal memo	Memo issued	
5.1.16	Form Facilities Preparation Working Group	Barrell	Anderson, Horak, Abey, Sipes, Childers, Spencer, Dwyer [Facil Prep Working Group]	1-90	8-90	5.1.15	Master Plan Chapters 5, 6 reviewed	Implement MP Tactical Facilities Prep Guide Action Steps	
5.1.17	Select SC-300 staff for training as Facilitators	Conn	Money, Strong, Leopold	2-90	3-90	Available training slots between 3/90-9/90	Formal memo	Training received	
5.1.18	Prepare draft charter for Facilities Preparation Working Group(s)	Barrell	Facilities Prep Working Group	2-90	4-90	5.1.15 P O2: T 2, 3, 7, 8 D M 1, 2, 4, 6-8	Draft Charter	Draft Charter sent to IRMAC	

Task Title: 5.1 Facilities Preparation Planning

April, 1990

Task Manager: M. Kirby SC-311

Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
5.1.19	Review draft Charter	IRMAC	IRMAC Working Group	4-90	8-90	5.1.18	Reviewed draft Charter	Draft Charter back to Barrell	
5.1.20	Ratify Facilities Preparation Working Group Charter	IRMAC		8-90	8-90	5.1.19; Review comments incorporated into final	Ratified Charter	Ratified Charter back to Barrell	
5.1.21	Form formal Review Team to review Adjustments to Floorplans and Facilities Preparation Inventory Datasheets	Conn	SC-300, 600 Mgmt Teams	9-90	12-90	5.1.17, 5.1.34, 5.1.35	Formal memo	Memo sent to Review Team Candidates	
5.1.22	Prepare Pilot Facilities Preparation Plan	Barrell	Facil Prep Working Group	1-91	3-91	5.1.16	Draft Pilot Facilities Prep Plan	Plan submitted for formal review	
5.1.23	Form formal Review Team for Pilot Facilities Preparation Plan	Conn	SC-300, 600 Mgmt Teams	4-91	4-91	5.1.22	Formal memo	Memo issued	
5.1.24	Conduct formal Review of Pilot Facilities Preparation Plan	Conn	Review Team	5-91	5-91	5.1.17, 5.1.23	Final Review Report (FRR)	Plan sent to Conn for decision	
5.1.25	Form formal Review Team to review Non-Pilot Facilities Preparation Plan	Conn	SC-300, 600 Mgmt Teams	4-92	4-92	5.1.16	Formal memo	Memo issued	
5.1.26	Conduct formal Review of Non-Pilot Facilities Preparation Plan	Conn	Review Team	5-92	5-92	5.1.17, 5.1.25	FRR	Plan sent to Conn for decision	

Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
5.1.27	Produce standards and instructions for BLM to use when preparing Floorplans and Facilities Preparation Inventory Datasheets	Porter	SC-651C and SC-673 staff	5-90	6-90	5.1.16 D M 1, 2, 4, 6, 7	Standards and Instructions	IM issued to AFOs	
5.1.28	Conduct inventory of SC-651C and SC-673 records to identify existing floorplans	Behr	SC-651C and SC-673 staff	7-90	7-90	5.1.16	Existing Floorplans identified	Floorplans collected	
5.1.29	Request floorplans from all field offices/lessors for sites which are not found in SC-651C and SC-673 records	Conn		8-90	8-90	5.1.28	Formal memo to AFOs	Memo issued	
5.1.30	Provide instructions to the field in marking up or "redlining" Floorplans to indicate existing conditions and for preparing Floorplans and Facilities Preparation Inventory Datasheets	Porter	SC-651C and SC-673 staff	8-90	8-90	5.1.27; Auto Cad workstations made available; additional structural mechanical and electrical engineering expertise acquired	Redlining instructions	Instructions sent to AFOs	
5.1.31	Send Site Managers draft Floorplans for field markup/verification and Facilities Preparation Inventory Datasheets for completion	Conn		9-90	9-90	5.1.27	Draft Floorplans and Datasheets	Floorplans and Datasheets sent to Site Managers	
5.1.32	Provide support to State Offices in collecting Facilities Inventory Data (i.e., mechanical, structural, electrical engineering expertise) for Facilities Inventory Datasheets where necessary	Porter	SC-651C and SC-673 Staff	9-90	12-90	5.1.27	Support/ Instruction	Support/ Instruction delivered	

Task Title: 5.1 Facilities Preparation Planning

April, 1990

Task Manager: M. Kirby SC-311

Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
5.1.33	Collect Facilities Preparation data for inclusion in Facilities Preparation Inventory Datasheets accompanying the Floorplans	SDs	Site Managers	9-90	12-90	5.1.27, 5.1.30, 5.1.32	Facilities Prep Data	Facilities Prep Data collected	
5.1.34	Produce draft Floorplans and Facilities Preparation Inventory Datasheets in accordance with established standards	SDs	Site Managers, SO Engineering staff	1-91	3-91	5.1.27, 5.1.30, 5.1.32	Redlined Floorplans and completed Datasheets	Collect redlined Floorplans and completed Datasheets	
5.1.35	Send draft Floorplans and completed Facilities Preparation Inventory Datasheets to SC-673	SDs		3-91	3-91	5.1.34		Floorplans and Datasheets sent	
5.1.36	Conduct formal review of Floorplans for compliance with BLM space requirements	Behr	Review Team	4-91	6-91	5.1.17, 5.1.27, 5.1.34	FRR	Floorplans reviewed	
5.1.37	Conduct formal review of Datasheets for completeness and accuracy	Porter	Review Team	4-91	6-91	5.1.17, 5.1.27, 5.1.34	FRR	Datasheets reviewed	
5.1.38	Modify Floorplans per Final Review Report (FRR) recommendations and the Decision of Acceptance/Rejection	Porter	SC-673 staff	6-91	7-91	5.1.36	Floorplans	Floorplans set up for final	
5.1.39	Verify/correct Facilities Preparation Inventory Datasheets	Behr/Porter	SC-651C staff	6-91	7-91	5.1.37	Datasheets	Datasheets set up for final	

Task Title: 5.1 Facilities Preparation Planning

April, 1990

Task Manager: M. Kirby SC-311

Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
5.1.40	Produce final Floorplans and Facilities Preparation Inventory Datasheets in accordance with established standards	Porter	SC-651C and SC-673 staff	7-91	8-91	5.1.27, 5.1.38, 5.1.39	Floorplans and Datasheets	Floorplans and Datasheets sent to Money	
5.1.41	Prepares consolidated Floorplans and Facilities Preparation Inventory Datasheets for delivery to the Target System Contractor	Money	SC-310 staff	8-91	8-91	5.1.40	Floorplans and Datasheets	Floorplans and Datasheets sent to Beierle	
5.1.42	Deliver Floorplans and Facilities Preparation Inventory Datasheets to the Target Contractor	Beierle		9-91	9-91	5.1.41	Floorplans and Datasheets	Floorplans and Datasheets sent to Target System Contractor	
5.1.43	Produce "redlined" Floorplans and Target Facilities Preparation Inventory Contractor Datasheets or, as necessary, Engineering Drawings where modifications will take place; identify problem areas such as lack of clearance/elevator sizes, etc.	Target System Contractor		10-91	4-92	5.1.42	Redlined Floorplans and Datasheets and/or Engineering Drawings	Redlined Floorplans, Datasheets or Engineering Drawings submitted to Beierle	
5.1.44	Form formal Review Team to review Redlined Floorplans and Facilities Preparation Inventory Datasheets or Engineering Drawings	Conn		3-92	3-92	5.1.16, 5.1.20, 5.1.43, Additional structural, mechanical and electrical engineering expertise acquired	Formal memo	Memo issued	

Task Title: 5.1 Facilities Preparation Planning

Task Manager: M. Kirby SC-311

Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
5.1.45	Conduct formal review of Redlined Floorplans and Facilities Preparation Inventory Datasheets and Engineering Drawings	Porter		4-92	6-92	5.1.17, 5.1.43, 5.1.44	FRR	FRR sent to Money for decision	
5.1.46	Make Decision of Acceptance/Rejection of Redlined Floorplans and Facilities Preparation Inventory Datasheets and Engineering Drawings based on Final Review Report (FRR)	Money		6-92	6-92	5.1.45	Formal decision	Formal decision sent to Beierle	
5.1.47	Prepare any adjustments to Floorplans and Facilities Preparation Inventory Datasheets relative to Accepted/Rejected Floorplans, Facilities Preparation Inventory Datasheets, and Engineering Drawings	Target System Contractor		7-92	9-92	5.1.46	Adjusted Floorplans and Datasheets; Engineering Drawings	Adjust Floorplans and Datasheets; Engineering Drawings sent to Beierle	
5.1.48	Conduct Site Survey Visits	Target System Contractor		10-91	4-92	5.1.42	Information for SPIP	Visits conducted	
5.1.49	Identify additional sites to BLM for Site Survey Visits	Target System Contractor		5-92	5-92	5.1.48	Formal memo	Memo sent to Beierle	
5.1.50	Identify additional sites to Target System Contractor for Site Survey Visits	Money		10-91	5-92	5.1.38, 5.1.39	Formal memo	Memo sent to Beierle	
5.1.51	Approve additional Site Survey Visits	Beierle		6-92	6-92	5.1.49, 5.1.50	Formal memo	Memo issued	
5.1.52	Conduct additional Site Survey Visits	Target System Contractor		7-92	9-92	5.1.51	Information for SPIP	Visits conducted	

Task Title: 5.2 Site Preparation and Installation Plan (SPIP) Review

Task Manager: L.J. Porter SC-673

Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
5.2.1	Submit Site Preparation and Installation Plan (SPIP) for Pilot Sites to BLM	Target System Contractor		10-91	4-92	5.1.42, 5.1.43, 5.1.46, 5.1.47	SPIP for Pilot Sites	SPIP submitted to Beierle	
5.2.2	Submit SPIP for Non-Pilot Sites to BLM	Target System Contractor		10-91	4-92	5.2.1	SPIP for non-Pilot Sites	SPIP submitted to Beierle	
5.2.3	Form SPIP-Pilot Site Review Team	Beierle	Money, Peterson	11-91	5-92	5.2.1	Formal memo	Memo sent to Review Team candidates	
5.2.4	Conduct SPIP-Pilot Site Review	Money	Kirby	1-92	7-92	5.2.1, 5.2.3	FRR	FRR sent to Money for decision	
5.2.5	Form SPIP Non-Pilot Site Review Team	Beierle	Money, Peterson	11-91	5-92	5.2.2	Formal memo	Memo issued	
5.2.6	Conduct SPIP Non-Pilot Site Review	Money	Kirby	1-92	7-92	5.2.2, 5.2.5	FRR	FRR sent to Money for decision	
5.2.7	Submit Local Area Network (LAN) and Wide Area Network (WAN) Wiring Installation Plans	Target System Contractor	Target System Contractor staff; BLM Field Offices, SC, WO	10-91	4-92	Contract Award, T 5, 8; 5.1.42, 5.1.43, 5.1.46, 5.1.47	Target System Contract; LAN and WAN Installation Plans, SPIP	Contract Award; SPIP submitted to Beierle	
5.2.8	Submit LAN and WAN Hardware and Software Installation Plans	Target System Contractor	Target System Contractor staff; BLM Field Offices, SC, WO	10-91	4-92	Contract Award; T 5, 8; 5.1.42, 5.1.43, 5.1.46, 5.1.47	Data Comm'n Plan, SPIP	BLM approves Plan; SPIP submitted to Beierle	

Task Title: 5.2 Site Preparation and Installation Plan (SPIP) Review

Task Manager: B. Beierle SC-652B

Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
5.2.9	Form LAN/WAN Network Wiring Plan Review Team	Beierle	Money, Peterson	11-91	5-92	T 5, 8; D M 1-9, 5.2.7	Formal review	Memo issued	
5.2.10	Form LAN/WAN H/W-S/W Installation Plan Review Team	Beierle	Money, Peterson	11-91	5-92	T 5, 8; D M 1-9, 5.2.8	Formal memo	Memo issued	
5.2.11	Conduct LAN/WAN Network Wiring Plan Review	Money	Kirby	1-92	7-92	T 5, 8; D M 1-9, 5.2.7, 5.2.9	FRR	FRR sent to Money for decision	
5.2.12	Conduct LAN/WAN H/W-S/W Installation Plan Review	Money	Kirby	1-92	7-92	T 5, 8; D M 1-9, 5.2.8, 5.2.10	FRR	FRR sent to Money for decision	

Task Title: 5.3 Site Preparation and Installation Plan (SPIP) Approval

Task Manager: M. Kirby SC-311

Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
5.3.1	Make Decision of Acceptance/Rejection of Pilot SPIP based on Final Review Report (FRR)	Money		4-92	6-92	5.2.1, 5.2.3, 5.2.4	Formal decision	Formal decision sent to Beierle	
5.3.2	Issue Notice of Pilot SPIP Approval	Beierle		6-92	6-92	5.3.1	Formal memo	Memo issued	
5.3.3	Notify Target System Contractor of Pilot SPIP Approval	Beierle		6-92	6-92	5.3.1, 5.3.2	Formal memo	Memo issued	
5.3.4	Make Decision of Acceptance/Rejection of Non-Pilot SPIP Approval	Money		4-92	6-92	5.2.2, 5.2.5, 5.2.6	Formal decision	Formal decision sent to Beierle	
5.3.5	Issue Notice of Non-Pilot SPIP Approval	Beierle		6-92	6-92	5.3.4	Formal memo	Memo issued	
5.3.6	Notify Target System Contractor of Non-Pilot SPIP Approval	Beierle		6-92	6-92	5.3.4, 5.3.5	Formal memo	Memo issued	

Task Title: 5.4 Site Modification Activities

Task Manager: M. Kirby SC-311

Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
5.4.1	Make SPIP-identified site modifications	SDs	SO Staff, Contractor Staff, Lessor Contractor Staff	7-92	1-93	5.1.13, 5.3.2, 5.3.5	Modified Site	Site ready for inspection	
5.4.2	Make SPIP-identified site modifications	Target System Contractor	Contractor Staff; Lessor Contractor Staff	7-92	1-93	5.1.13, 5.3.2, 5.3.5	Modified Site	Site ready for inspection	
5.4.3	Install LAN and WAN wiring	Target System Contractor	Contractor staff; BLM Field Office, SC, WO; Lessor Contractor Staff	7-92	1-93	Data Comm'n Plan, 5.6.1, 5.6.2; T 8	LAN and WAN wiring	LAN and WAN wiring installed	

Task Title: 5.5 Facility Inspection and Correction

Task Manager: M. Kirby SC-311

Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
5.5.1	Inspect all Pilot sites for compliance with SPIP-identified site modifications	Target System Contractor	Contractor Staff; BLM Staff	2-93	4-93	5.3.2, 5.4.1, 5.4.2, 5.4.3	Inspected Site	Site ready for certification	
5.5.2	Inspect all other sites for compliance with SPIP-identified site modifications	Target System Contractor	Contractor Staff; BLM Staff	2-93	4-93	5.3.5, 5.4.1, 5.4.2, 5.4.3, 5.5.1	Inspected Site	Site ready for certification	
5.5.3	Issue Certification of Site Readiness for Pilot Sites	Target System Contractor	Contractor Staff	5-93	5-93	5.5.1	Certification	Certification sent to Beierle	
5.5.4	Issue Certification of Site Readiness for Non-Pilot Sites	Target System Contractor	Contractor Staff	5-93	9-99	5.5.2	Certification	Certification sent to Beierle	

Task Title: 5.6 Installation Authorization

Task Manager: B. Beierle SC-652B

Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
5.6.1	Issue Installation Authorization: Pilot Sites	Beierle	Review Team	6-93	6-93	5.5.3; D M 1-9; T 1-8	Authorization	Authorization sent to Contractor	
5.6.2	Issue Installation Authorization: Non-Pilot Sites	Beierle	Review Team	6-93	6-99	5.5.4; D M 1-9; T 1-8	Authorization	Authorization sent to Contractor	

6 System Installation

The System Installation task has eight components: support and coordination, installation planning, data communication LAN and WAN installation, hardware installation, software installation, system checkout, site/system inspection, and Post-Installation Review. The organizational responsibilities and strategy for system installation, including installation planning, requirements, and support provisions are presented in this Section.

A. Assumptions-

- Chartered Working or Planning groups established for Site Preparation are reborn as Installation work or planning groups.
- Working or Planning groups have staff committed for activity lifetimes.
- Minimum number of hardware, software, Engineering Change Proposals (ECPs) are required from developmental baseline for system.
- Site Managers at all field offices will serve as Bureau's official representative(s) to Contractor's Installation Team(s).
- Site Managers will have experience or training in aspects of data communications, hardware, software installation.
- Installation of Target System is incremental: first Pilot, then Bureauwide Administrative Services, Land and Mineral Management, Resource Management, and Technical Services.
- Data communications network(s) are installed first, hardware platforms are then linked to the data communications network(s), and finally software is installed on the linked hardware platforms.
- Data communications and data communications support are independent parts of Facilities Preparation and System Installation.
- There are sufficient number of trained facilitators to support review teams, not later than 9/90.
- Clerical and editorial support is guaranteed for the Review Teams.
- Logistical support is available for field office support.
- Review personnel for formal Reviews are not the same people who wrote the product being reviewed.
- Review and production of Final Review Report (FRR) is accomplished in less than 30 days.
- Reviews follow procedures outlined in the draft Document Management Policy, 3/27/89.

- All team or staff functional designations are accomplished using formal, written memoranda.
- Installation planning for Pilot efforts (e.g., Administrative Services, Land and Mineral Management, Resource Management, Technical Services) are complete before migrating planning outside of Pilot.
- Approvals of SPIPs occur within 20 days of receipt.
- WO designates Pilot Site Managers and State Directors designate Non-Pilot Site Managers.
- The Installation Planning Group is formed and functioning prior to SPIP generation.
- The Installation Planning Group's tenure begins prior to Pilot and includes Non-Pilot Installation activities.
- Installation will have to be implemented in such a fashion as to support parallel operation of the Target System along with in-place and/or Interim systems (i.e., public room operations and developmental public room activities).

6.1 System Installation Support and Coordination

Task Manager: M. Kirby SC-311

The Target System Contractor will install the Target System at designated sites (See pending Bureau of Land Management Draft **Request For Proposal (RFP)** Table J.1-3, Site Installation Schedule) in a timely and cost effective manner, and with minimum impact on daily operations. The BLM will monitor all phases of this activity. To accomplish this, the Service Center Division of Modernization will support and coordinate installation activities between the Washington and State Offices, other Service Center units, BIFC and the Target System Contractor(s).

6.2 Contractor System Installation Planning

Task Manager: M. Kirby SC-311

The BLM Site Managers will monitor the Target System Contractor's Site Survey Evaluation and subsequent development of Site Preparation and Installation Plans (SPIPs) governing the installation of the Target System at all designated BLM sites. The Target System Contractor(s) shall maintain installation plans, descriptions, and supportive documentation until certification and acceptance of the Target System by the BLM.

The BLM currently estimates that 12 - 16 BLM/Contractor teams will be required to install the Target System at designated sites within TBD months after the start of System Installation.

System Installation, including data communication LAN and WAN, hardware, and software installation, system check out, site/system inspection, and site certification for IOC shall be conducted in accordance with the Target System Implementation Schedule (BLM Draft RFP Table J.1-3).

6.3 Data Communication LAN and WAN Installation

Task Manager: M. Kirby SC-311

The BLM will monitor the Target System Contractor's installation of the LAN and WAN hardware and software following the site schedule for each functional area outlined in BLM Draft RFP Table J.1-3.

a. Install the data communication LAN and WAN hardware and software for Administrative Services.

b. Install the data communication LAN and WAN hardware and software for Land and Minerals Management.

c. Install the data communication LAN and WAN hardware and software for Resource Management.

d. Install the data communication LAN and WAN hardware and software for Technical Services.

6.4 Hardware Installation

Task Manager: M. Kirby SC-311

The BLM will monitor the Contractor's installation of the Target System hardware in accordance with the Target System Site Preparation and Installation Plans (SPIPs) and Schedule(s). Hardware installation shall begin after data communications wiring has been completed, the site has been certified for installation, all system components have arrived on-site (unless waivers are authorized in writing by the BLM Site Installation Manager), and the Target System Contractor has received an Installation Authorization from BLM.

The BLM will monitor the following hardware installation activities:

a. Equipment unpacking and inspection by the Target System Contractor(s);

b. Hardware installation by the Target System Contractor(s);

c. Hardware checkout activities conducted by the Target System Contractor(s);

6.5 Software Installation

Task Manager: M. Kirby SC-311

The BLM Site Managers will monitor the Contractor's installation of the Target System operating system and application software at each designated BLM site. Installation shall begin when the appropriate hardware platforms have been installed according to the software installation schedule contained in the SPIPs and Schedule(s).

Commercial-Off-the-shelf (COTS) and custom application software to support system and application-related requirements will be defined at Critical Design Review (CDR).

6.6 System Checkout

Task Manager: M. Kirby SC-311

The BLM Site Managers will monitor the Target System Contractor's system checkout of the physical assembly, electrical continuity, power, clock rates, interconnections, and environmental requirements of the installed System configuration to assure that installation has been completed in accordance with the approved Site Preparation and Installation Plan(s).

6.7 Site/System Inspection

Task Manager: M. Kirby SC-311

The Contractor(s) shall inspect each designated site to assure that the Target System has been installed according to contract specifications. These inspections will be monitored by the Service Center, and checked by the appropriate BLM organization (Washington and State Offices and/or BIFC), to ensure that discrepancies have been identified and corrected, the System meets all requirements specified in the Site Preparation and Installation Plan(s), and all sites have been cleaned up prior to the departure of the Contractor(s) installation teams.

6.8 Post-Installation Review

Task Manager: M. Kirby SC-311

The BLM Site Managers will monitor the Contractor's performance of a Post-Installation Review of the installation history of each site, and the preparation detailed documentation that includes, but is not limited to:

a. Site Installation history;

b. Final as-built engineering configuration of the site;

c. As-built configuration of the installed data communications network(s);

d. As-built configuration of the installed hardware;

e. Description and documentation of the installed software;

f. Description and results of field integration tests;

g. Results of the Contractor Site/System Inspection.

6.9 External Sites

TBD (no action plan)

Task Title: 6.1 System Installation Support and Coordination

Task Manager: M.Kirby SC-311

Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
6.1.1	Continue 5.1 Coordination Activities through Installation	Money Moeller	AFOs	5-92	2-99	TA 5; DM 1, 2, 6, 8; T 2, 3, 4, 7; PO 2-5; All TA Chap 6 Assumptions, Policy Considerations, and Risks			

Task Title: 6.2 System Installation Planning

Task Manager: M.Kirby SC-311

Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
6.2.1	Monitor the Contractor's Maintenance and Updating of the Site Preparation and Installation Plans (SPIPs)	Kirby	Facilities Prep Working Group	5-92	2-99	TA 5; DM 1, 2, 6, 8; T 2, 3, 4, 7, 8; PO 2-4; All TA Chap 6 Assumptions, Policy Considerations, and Risks			

Task Title: 6.3 Data Communication Local Area Network (LAN) and Wide Area Network (WAN) Installation

Task Manager: M.Kirby SC-311

Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
6.3.1	Monitor Contractor's Installation of the Data Communication LAN and WAN Hardware and Software for Administrative Services	Kirby	Site Managers; Facilities Prep Working Group	2-93	8-93	TA 5; DM 1, 2, 6, 8; T 2, 3, 4, 7, 8; PO 2-4; All TA Chap 6 Assumptions, Policy Considerations, and Risks, BLM Draft RFP Table J.1-3			
6.3.2	Monitor Contractor's installation of the Data Communication LAN and WAN Hardware and Software for Land and Mineral Management	Kirby	Site Managers; Facilities Prep Working Group	3-94	9-94	TA 5: DM 1, 2, 6, 8; T 2, 3, ,4, 7, 8; PO 2-4; All TA Chap 6 Assumptions, Policy Considerations and Risks; BLM Draft RFP Table J.1-3			
6.3.3	Monitor Contractor's Installation of the Data Communication LAN and WAN Hardware and Software for Resource Management	Kirby	Site Managers; Facilities Prep Working Group	7-98	1-99	TA 5; DM 1, 2, 6, 8; T 2, 3, 4, 7, 8; PO 2-4; All TA Chap 6 Assumptions, Policy Considerations, and Risks; BLM Draft RFP Table J.1-3			
6.3.4	Monitor Contractor's Installation of the Data Communication LAN and WAN Hardware and Software for Technical Services	Kirby	Site Managers; Facilities Prep Working Group	8-98	2-99	TA 5; DM 1, 2, 6, 8; T 2, 3, 4, 7, 8; PO 2-4; All TA Chap 6 Assumptions, Policy Considerations, and Risks; BLM Draft RFP Table J.1-3			

Task Title: 6.4 Hardware Installation

Task Manager: M.Kirby SC-311

Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
6.4.1	Monitor Contractor's Installation of Hardware for Administrative Services	Kirby	Site Managers; FPWG	2-93	8-93	TA 5; DM 1, 2, 6, 8; T 2, 3, 4, 7, 8; PO 2-4; All TA Chap 6 Assumptions, Policy Considerations, and Risks; BLM Draft RFP Table J.1-3			
6.4.1.1	Monitor Contractor's Unpacking and Inspection of Hardware	Kirby	Site Managers; FPWG	2-93	8-93				
6.4.1.2	Monitor Contractor's Installation of Hardware	Kirby	Site Managers; FPWG	2-93	8-93				
6.4.1.3	Monitor Contractor's Hardware Checkout	Kirby	Site Managers; FPWG	2-93	8-93				
6.4.2	Monitor Contractor's Installation of Hardware for Land and Mineral Management	Kirby	Site Managers; FPWG	3-94	9-94	TA 5; DM 1, 2, 6, 8; T 2, 3, 4, 7, 8; PO 2-4; All TA Chap 6 Assumptions, Policy Considerations, and Risks; BLM Draft RFP Table J.1-3			
6.4.2.1	Monitor Contractor's Unpacking and Inspection of Hardware	Kirby	Site Managers; FPWG	3-94	9-94				
6.4.2.2	Monitor Contractor's Installation of Hardware	Kirby	Site Managers; FPWG	3-94	9-94				
6.4.2.3	Monitor Contractor's Hardware Checkout	Kirby	Site Managers; FPWG	3-94	9-94				

Task Title: 6.4 Hardware Installation

April, 1990

Task Manager: M.Kirby SC-311

Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
6.4.3	Monitor Contractor's Installation of Hardware for Resource Management	Kirby	Site Managers; FPWG	7-98	1-99	TA 5; DM 12, 6, 8; T2, 3, 4, 7, 8; PO 2-4; All TA Chap 6 Assumptions, Policy Considerations, and Risks; BLM Draft RFP Table J.1-3			
6.4.3.1	Monitor Contractor's Unpacking and Inspection of Hardware	Kirby	Site Managers; FPWG	7-98	1-99				
6.4.3.2	Monitor Contractor's Installation of Hardware	Kirby	Site Managers; FPWG	7-98	1-99				
6.4.3.3	Monitor Contractor's Hardware Checkout	Kirby	Site Managers; FPWG	7-98	1-99				
6.4.4	Monitor Contractor's Installation of Hardware for Technical Services	Kirby	Site Managers; FPWG	8-98	2-99	TA 5; DM 1, 2, 6, 8; T 2, 3, 4, 7, 8; PO 2-4; All TA Chap 6 Assumptions, Policy Considerations, and Risks; BLM Draft RFP Table J.1-3			
6.4.4.1	Monitor Contractor's Unpacking and Inpsection of Hardware	Kirby	Site Managers; FPWG	8-98	2-99				
6.4.4.2	Monitor Contractor's Installation of Hardware	Kirby	Site Managers; FPWG	8-98	2-99				
6.4.4.3	Monitor Contractor's Hardware Checkout	Kirby	Site Managers; FPWG	8-98	2-99				

Task Title: 6.5 Software Installation

April, 1990

Task Manager: M.Kirby SC-311

Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
6.5.1	Monitor Contractor's Installation of Software for Administrative Services	Kirby	Site Managers; FPWG	2-93	8-93	TA 5; DM 1, 2, 6, 8; T 2, 3, 4, 7, 8; PO 2-4; All TA Chap 6 Assumptions, Policy Considerations, and Risks; BLM Draft RFP Table J. 1-3			
6.5.1.1	Monitor Contractor's Unpacking and Inspection of Software	Kirby	Site Managers; FPWG	2-93	8-93				
6.5.1.2	Monitor Contractor's Installation of Software	Kirby	Site Managers; FPWG	2-93	8-93				
6.5.1.3	Monitor Contractor's Software Checkout	Kirby	Site Managers; FPWG	2-93	8-93				
6.5.2	Monitor Contractor's Installation of Software for Land and Mineral Management	Kirby	Site Managers; FPWG	3-94	9-94	TA 5; DM 1, 2, 6, 8; T 2, 3, 4, 7, 8; PO 2-4; All TA Chap 6 Assumptions, Policy Considerations, and Risks; BLM Draft RFP Table J.1-3			
6.5.2.1	Monitor Contractor's Unpacking and Inspection of Software	Kirby	Site Managers; FPWG	3-94	9-94				
6.5.2.2	Monitor Contractor's Installation of Software	Kirby	Site Managers; FPWG	3-94	9-94				
6.5.2.3	Monitor Contractor's Software Checkout	Kirby	Site Managers; FPWG	3-94	9-94				

Task Title: 6.5 Software Installation

Task Manager: M.Kirby SC-311

Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
6.5.3	Monitor Contractor's Installation of Software for Resource Management	Kirby	Site Managers; FPWG	7-98	1-99	TA 5: DM 1, 2, 6, 8; T2, 3, 4, 7, 8; PO 2-4; All TA Chap 6 Assumptions, Policy Considerations, and Risks; BLM Draft RFP Table J.1-3			
6.5.3.1	Monitor Contractor's Unpacking and Inspection of Software	Kirby	Site Managers; FPWG	7-98	1-99				
6.5.3.2	Monitor Contractor's Installation of Software	Kirby	Sit Managers; FPWG	7-98	1-99				
6.5.3.3	Monitor Contractor's Software Checkout	Kirby	Site Managers; FPWG	7-98	1-99				
6.5.4	Monitor Contractor's Installation of Software for Technical Services	Kirby	Site Managers; FPWG	8-98	2-99	TA 5; DM 1, 2, 6, 8; T 2, 3, 4, 7, 8; PO 2-4, All TA Chap 6 Assumptions, Policy Considerations, and Risks; BLM Draft RFP Table J.1-3			
6.5.4.1	Monitor Contractor's Unpacking and Inspection of Software	Kirby	Site Managers; FPWG	8-98	2-99				
6.5.4.2	Monitor Contractor's Installation Software	Kirby	Site Managers; FPWG	8-98	2-99				
6.5.4.3	Monitor Contractor's Software Checkout	Kirby	Site Managers' FPWG	8-98	2-99				

Task Title: 6.6 System Checkout

Task Manager: M.Kirby SC-311

Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
6.6.1	Monitor System Checkout for Administrative Services	Kirby	Site Managers; FPWG	2-93	8-93	TA 5; DM 1, 2, 6, 8; T 2, 3, 4, 7, 8; PO 2-4; All TA Chap 6 Assumptions, Policy Considerations, and Risks; BLM Draft RFP Table J.1-3			
6.6.2	Monitor System Checkout for Land and Mineral Management	Kirby	Site Managers; FPWG	3-94	9-94	TA 5; DM 1, 2, 6, 8; T 2, 3, 4, 7, 8; PO 2-4; All TA Chap 6 Assumptions, Policy Considerations, and Risks; BLM Draft RFP Table J.1-3			
6.6.3	Monitor System Checkout For Resource Management	Kirby	Site Managers; FPWG	7-98	1-99	TA 5; DM 1, 2, 6, 8; T 2, 3, 4, 7, 8; PO 2-4; All TA Chap 6 Assumptions, Policy Considerations, and Risks; BLM Draft RFP Table J.1-3			
6.6.4	Monitor System Checkout for Technical Services	Kirby	Site Managers; FPWG	8-98	2-99	TA 5; DM 1, 2, 6, 8; T 2, 3, 4, 7, 8; PO 2-4; All TA Chap 6 Assumptions, Policy Considerations, and Risks; BLM Draft RFP Table J.1-3			

Task Title: 6.7 Site/System Inspection

Task Manager: M.Kirby SC-311

Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
6.7.1	Monitor Site/System Inspection for Administrative Services	Kirby	Site Managers; FPWG	2-93	8-93	TA 5; DM 1, 2, 6, 8; T 2, 3, 4, 7, 8; PO 2-4; All TA Chap 6 Assumptions, Policy Considerations, and Risks; BLM Draft RFP Table J.1-3			
6.7.2	Monitor Site/System Inspection for Land and Mineral Management	Kirby	Site Managers; FPWG	3-94	9-94	TA 5; DM 1, 2, 6, 8; T 2, 3, 4, 7, 8; PO 2-4; All TA Chap 6 Assumptions, Policy Considerations, and Risks; BLM Draft RFP Table J.1-3			
6.7.3	Monitor Site/System Inspection for Resource Management	Kirby	Site Managers; FPWG	7-98	1-99	TA 5; DM 1, 2, 6, 8; T 2, 3, 4, 7, 8; PO 2-4; All TA Chap 6 Assumptions, Policy Considerations, and Risks; BLM Draft RFP Table J.1-3			
6.7.4	Monitor Site/System Inspection for Technical Services	Kirby	Site Managers; FPWG	8-98	2-99	TA 5; DM 1, 2, 6, 8; T 2, 3, 4, 7, 8; PO 2-4; All TA Chap 6 Assumptions, Policy Considerations, and Risks; BLM Draft RFP Table J.1-3			

Task Title: 6.8 Post-Installation Review

Task Manager: M.Kirby SC-311

Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
6.8.1	Monitor Post-Installation Review for Administrative Services	Kirby	Site Managers; FPWG	2-93	8-93	TA 5; DM 1, 2, 6, 8; T 2, 3, 4, 7, 8; PO 2-4; All TA Chap 6 Assumptions, Policy Considerations, and Risks; BLM Draft RFP Table J.1-3			
6.8.2	Monitor Post-Installation Review for Land and Mineral Management	Kirby	Site Managers; FPWG	3-94	9-94	TA 5; DM 1, 2, 6, 8; T 2, 3, 4, 7, 8; PO 2-4; All TA Chap 6 Assumptions, Policy Considerations, and Risks; BLM Draft RFP Table J.1-3			
6.8.3	Monitor Post-Installation Review for Resource Management	Kirby	Site Managers; FPWG	7-98	1-99	TA 5; DM 1, 2, 6, 8; T 2, 3, 4, 7, 8; PO 2-4; All TA Chap 6 Assumptions, Policy Considerations, and Risks; BLM Draft RFP Table J.1-3			
6.8.4	Monitor Post-Installation Review for Technical Services	Kirby	Site Managers; FPWG	8-98	2-99	TA 5; DM 1, 2, 6, 8; T 2, 3, 4, 7, 8; PO 2-4; All TA Chap 6 Assumptions, Policy Considerations, and Risks; BLM Draft RFP Table J.1-3			

7 Transition

RESERVED - will be addressed in the next version.

8 Documentation Management

The development, subsequent maintenance and management of a comprehensive, effective system for centrally locating and controlling the handling of documentation produced throughout the course of the Target System Development Life Cycle is essential to the goals of the Target System Acquisitions.

8.1 Document Management Guide

Task Manager: M. Kirby SC-311

The Division of Modernization will develop a comprehensive Document Management Guide (DMG) to provide the administrative framework to ensure the organized and timely management and review of Target System documentation. The DMG will include: the relationship of the DMG to other plans, workgroups, boards, and libraries; roles, responsibilities, and relationships of organizations involved in implementing the DMG; example(s) of Management Information System (MIS) outputs and reports supportive of the DMP; specifications, guidelines, and example(s) of the Target System document review methodology.

A. Assumptions-

- A Document Management Policy (DMP) will be developed and approved by BLM to be used in the preparation of guidelines for Target System Documentation Management.
- The DMG will be developed in accordance with the BLM DMP.
- The DMG, as written and approved, will be adhered to and no deviations will occur unless substantial reasoning is given.
- The DMG policies and procedures, as written and approved, will be used for all documents; not only contract deliverables.
- Contractor will adhere to policy and procedures outlined in DMG.
- The DMP will be used to incorporate all SC-300 Divisions into a united Document Management effort.

B. Policy Considerations-

- Management will support the policy and procedures as identified in the DMP and DMG.
- Management will render feedback as necessary relative to that which is written in the DMG.
- Management will assure that Contractor is following the guidelines presented in DMG.
- Management will support the organization and management of a united SC-300 Document Management function.

8.2 Document Identification and Collection

Task Manager: M. Kirby SC-311

The Division of Modernization and other offices involved in the development of the Target System will identify and collect significant documents and other materials directly related to the Target System or follow-on system for inclusion in a Project Documentation Library (PDL). Subsequently, these materials will be made available for review, check-out, and distribution, as needed.

Significant documents will be identified as those stating (outlining), identifying, or explaining processes, proposals, decisions, or critical actions that have been or will be taken relative to planning, organizing, procuring, and implementing various phases of the Target System.

Throughout the life cycle of the Target System, each project milestone relative to the contracting effort will have associated documentation. This documentation will be comprised of two classes; namely:

a. Functional Documents - The purpose of these will be to communicate information between the Contractor and BLM. Examples are User Manuals and Site Surveys.

b. Developmental Documents - The purpose of these will be to allow BLM to track the Contractor's progress. Examples are Implementation Plans and Design Reports.

A full set of Functional and Developmental documents will include the detailed information needed for technical management, operation, and system use.

A. Assumptions-

- o Only those documents that are significantly related to the Target System will be identified, collected, and made available for review/check-out/distribution.
- o The staff personnel involved in Documentation Identification and Collection will cooperate to the extent necessary to obtain those documents crucial to the Target System and make them available for location in the PDL.
- o The Identification and Collection of documents significant to the Target System will occur on a regular basis and not sporadically.
- o Document identification and collection will be carried out by all SC-300 Divisions.

B. Policy Considerations-

- o Management will cooperate to the extent that they make their staffs aware of the need to identify and collect documentation significant to the Target System and make it available to the PDL.
- o Management will assure that the Contractor makes the required documentation available to the PDL.
- o Management will assure that the Contractor makes all required documentation available to the specified installation sites.

8.3 Document Control

Task Manager: M. Kirby SC-311

The procedure used for the control of documents received for inclusion in the Project Documentation Library (PDL) will entail a centrally-located organized system. Only those documents concerned with the development, tracking, and subsequent implementation of the Target System will be located in the PDL.

Eventually, the control of documents will be handled through a completely automated system. This automated system is intended to provide an efficient method that will be both accurate and effective for tracking, reviewing, summarizing, cross-referencing, and indexing documents for future reference and use as necessary.

A. Assumptions-

- o A specifically identified comprehensive system will be used for controlling documents received for incorporating into the PDL. Said system will be adhered to and no deviations permitted unless well justified.
- o Cooperation will be granted by all concerned in aiding to get the automated system fully operational in a reasonable amount of time. Same goes for the entry of documents into the automated system.

B. Policy Considerations-

- o Management will understand and support the entire effort required for pursuing a fully automated system for document control.

8.4 Reference Library

Task Manager: M. Kirby SC-311

The Target System PDL is an all-encompassing library incorporating existing and new documentation developed during the conduct of the Modernization Project's Target System from its inception. All documentation, whether it is contract sensitive or of potential reference value to the Bureau in the future, resides in the internal project office documentation library.

This Documentation Library is the repository of titles, subjects, authors, creation dates, review dates, revision dates, and any information related to the existing document portfolio supported by an automated library management tool called the Document Index of Authoritative Titles (DIAT).

A. Assumptions-

- o There will be a PDL and it will be used to store only those documents pertaining to the Target System.
- o The Document Index of Authoritative Titles (DIAT) will be the automated system used to enter and track data pertinent to the documents stored in the PDL.

- Various publications will be developed and/or received by the BLM and made a part of the PDL.
- Staffs or individuals preparing Target System-related publications will assure that at least one copy is made available for incorporating in the PDL.
- All SC-300 offices need to be concerned with organizing, maintaining and managing an efficient and effective Reference Library. Possibly consolidate with SC-310 system and make this an entire SC-300 function

B. Policy Considerations-

- Management will support the establishment of a PDL and the Document Index of Authoritative Titles (DIAT) as the automated tool for entering and tracking data relative to the documents stored in the Library.
- Management will afford the personnel needed to enter document data into the automated system as it is received.
- Management will assure that a systematized approach will be used for the consistent collection of Target System-related documents for inclusion in the PDL.
- Management will cooperate to the extent it takes to assure that significant Target System-related publications are made available to the PDL.
- Management will bring to the attention of their respective staffs the need to prepare and disseminate for availability to the PDL, Target System-related publications.

8.5 Contractor(s) Prepared Documentation Management and Review

Task Manager: M. Kirby SC-311

The BLM will manage and review Contractor-prepared documentation in accordance with BLM Document Management policies and procedures.

8.6 Publications

Task Manager: M. Kirby SC-311

Throughout the Target System Life Cycle, various publications will be developed and/or received by the BLM that are related to Target System issues, concepts, and functions. Information related to the Target System may be published periodically through newsletters, bulletins, and/or special reports. As these publications relate to the various facets of the Target System they will become part of the PDL.

A. Assumptions-

- Policy and procedure guidelines will be established to assure a specific process is followed to assure receipt of relevant publications.

B. Policy Considerations-

- Management will assure that a systematic approach will be used for the consistent collection of publications relating to Target System issue, concepts, and functions, for subsequent incorporation in PDL.

8.7 Vendors Reference Library

Task Manager: M. Kirby SC-311

The Division of Modernization and the Branch of Information Resource Acquisition (SC-652) have established the Vendors Reference Library (VRL) to provide a central source point where interest parties (including the Target System's outside vendor community) could review materials that pertain to the Target System (formerly ALMRS-GIS Project).

The VRL is only a temporary source of reference and will be dismantled once the Request for Proposal (RFP) is released and subsequent contract award is made by the Target System.

This library is intended to contain documents that are non-sensitive and normally releasable to the public and that are a source of background, historical, and reference information about this project. It is an attempt to organize relevant materials and avoid the need to require Freedom of Information Act (FOIA) requests.

A. Assumptions-

- BLM approved documents necessary for informing the vendor community and the general public about Modernization have been included in the VRL.
- No procurement sensitive material has been made a part of the VRL.
- The vendor community has had adequate opportunity to view the documents in the VRL.

B. Policy Considerations-

- Management will provide adequate staffing to maintain the VRL until contract award.

Task Title: 8.1 Develop Document Management Guide

Task Manager: M. Kirby SC-311

Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
8.1	Develop Document Management Guide	SC-311	Money/Kirby (review/ approve) Additional Unknown Staff Support	TBD	TBD	SC-310 Staff Support (see Data, 8.1) and Configuration Management, 10	Comments/ Correction/ Review/ Approve	SC-310 Approval	Draft/Final Products

Task Title: 8.2 Document Identification and Collection

Task Manager: M. Kirby SC-311

Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
8.2	Document Identification and Collection	SC-311 Other Appropriate SC-310 and Target System Involved Staff	McGinnis/All SC-310 Staffs Additional Unknown Available Staff Support		On-going Effort	Cooperation of All Responsible SC-310 Staff Personnel (see Data, 8.1) and Configuration Management, 10	Documents for Inclusion in Project Documentation Library (PDL)	Appropriate Documents are Available for Review, Check-out, and Other Necessary Action (On-going Effort)	Documents Must Continue to be Identified and Collected so as to Keep Project Documentation Library a Comprehensive Reference Source

Task Title: 8.3 Document Control

April, 1990

Task Manager: M. Kirby SC-311

Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
8.3	Document Control	SC-311 Other Unidentified SC-310 and Target System Staff Personnel	McGinnis/All SC-310 Staffs Additional Unknown Available Staff Personnel		On-going Effort	Receipt of Documents and Cooperation of all Responsible Staff Personnel (see Data, 8.1) and Configuration Management, 10	Documents are Received for Control, Handling, Review, etc.	Documents are Received, Reviewed, and Other Action Taken as Necessary	The specifically identified system must be used for all documents, whether in house prepared or contract deliverable

Task Title: 8.4 Manage Reference Library

Task Manager: M. Kirby SC-311

Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
8.4	Manage Reference Library	SC-311 Other Unidentified SC-310 and Target System Staff Personnel	McGinnis/All SC-310 Staffs		On-going Effort	Cooperation of all responsible SC-310 Staff Personnel (see Data, 8.0-8.3) and Configuration Management, 10	Documents continue to be received for incorporation into Project Documentation Library (PDL)	Documents are available for review as requests are received	Documents crucial to the Target System must be made available to Project Documentation Library for review purposes, as necessary. Magnetic media be made available (as well as the accompanying funding) for the storing of document hard copies.

Task Title: 8.5 Contractor(s) Prepared Document Management and Review

Task Manager: M. Kirby SC-311

Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
8.5	Contractor(s) Prepared Document Management and Review	This task will be managed in accordance with BLM Document Management policies and procedures							

Task Title: 8.6 Develop Publications

Task Manager: M. Kirby SC-311

Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
8.6	Develop Publications	SC-310 Staffs	Kirby and other SC-310 Branch/Staff Chiefs		On-going Effort	Cooperation of all responsible SC-310 Staff Personnel (see Data, 6.1) and Configuration Management, 10	Publications are prepared/received for inclusion in Project Documentation Library	Specific publications relating to Target System areas are available in PDL for review, etc.	The area of publications needs to be reinforced to SC-310 managers as presently it is a dead issue

Task Title: 8.7 Manage Vendor's Reference Library

Task Manager: M. Kirby SC-311

Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
8.7	Manage Vendors Reference Library	This reference source is only of temporary use and will be abolished once the contract for the Target System is awarded, therefore will not be specifically identified in depth.							

9 Integrated Logistics Support

This section presents the Integrated Logistical Support (ILS) activities and responsibilities required to successfully deploy and support the Target System.

Integrated Logistics Support (ILS) is an approach that brings together:

- support requirements related to performance objectives;
- plans for the acquisition of required support; and
- methods for operations support;

in a timely and cost effective manner.

A. **Assumptions-**

- The Federal Acquisition Regulations (FAR) Part 7 provides sufficient guidance, policies, and procedures for ILS.
- Management of ILS is delegated to SC-310.
- Present procurement documentation can be tracked through SC-310 or SC-650 clearinghouse.
- The Annual Work Plan (AWP) process can be made the vehicle for establishing the procurement of necessary ILS.

B. **Policy Considerations-**

- Delegation of development, preparation, management, and implementation of ILS to SC-310 is formally ratified by WO.
- Decision is made about post-acceptance system maintenance support.

9.1 Integrated Logistics Support and Coordination

Task Manager: M. Kirby SC-311

The Service Center Division of Modernization will be responsible for the development, preparation, and implementation of the Integrated Logistics Support Guide (ILSG). At any point in the Target System life cycle, the level of detail in the ILSG will be consistent with the current phase of development or implementation of the Target System. The ILSG is designed as a "living document," that permits the functional transition to the next phase of the life cycle.

ILS will be initiated during the concept formulation phase of the acquisition life cycle by the Target System Logistics Manager. The concepts, policies, procedures, and requirements for Integrated Logistics Support are contained within the ILSG. The Target System ILSG is based on the guidance provided in Federal Acquisition Regulation (FAR) Part 7.

9.2 Logistics Support Management

Task Manager: M. Kirby SC-311

The Service Center Division of Modernization will ensure that logistics considerations and planning are integrated with the Target System engineering design process.

9.3 BLM Site Support

Task Manager: M. Kirby SC-311

All site support items will be purchased and/or provided to the Target System Contractor(s) by the Washington and State Offices and Service Center, each for sites under their jurisdiction. Site support items will be made available to the Target System Contractor(s) from start of the installation phase of the life cycle until System certification and acceptance. Certification and acceptance criteria are discussed in Chapter 14 of this Section of the Master Plan. The BLM will ensure that the site support items identified in this section are contained in the Target System contract. In the event of conflict between this Plan and the Target System contract, the contract will govern.

9.4 Government Furnished Equipment/Government Furnished Property (GFE/GFP) Maintenance and Support

Task Manager: M. Kirby SC-311

All Government Furnished Equipment/Government Furnished Property (GFE/GFP) items required for system installation will be purchased and/or provided by the Washington and State Offices and Service Center. Any existing and usable hardware and/or software will be made available to the Target System Contractor(s) according to the Contractor(s)' schedule for system installation, software conversion, and system integration testing. Access to Government communications systems, such as interfaces with Local and Wide Area Networks (LANs & WANs), will also be available to the Contractor(s).

Maintenance support for all GFE/GFP items will be provided by the responsible BLM Site Manager. Planning and coordination will be performed by the BLM site manager to minimize adverse impacts to resources, costs and the overall installation schedule.

A list of GFE/GFP items to be provided to the Contractor(s) will be developed by the Integrated Logistics Workgroup.

9.5 Logistics Planning

Task Manager: M. Kirby SC-311

The BLM Logistics Manager assisted by all Site Managers will monitor ILS provided by Target System Contractor(s). This monitoring effort will ensure that the Target System meets the reliability/maintainability/availability requirements of the Bureau. The activities that the BLM will monitor are Contractor's performance of the following planning functions:

a. Integrated Logistics Support Analysis. The Target System Contractor(s) preparation of Logistics Support Analysis Reports which identify and analyze specific Target System support requirements and provide a unified approach to Target System logistics over the acquisition life cycle.

The first analysis shall be delivered to the BLM in draft form at the time of System Design Review and in final form at Preliminary Design Review. Subsequent reports will be delivered to the Bureau on an as-required basis over the acquisition life cycle of the Target System. The BLM will review for approval/rejection all Logistics Support Analysis Reports.

b. Integrated Support Planning. Based upon the results of the Integrated Logistics Support Analyses, the Target System Contractor(s) shall prepare Integrated Support Guides. These Guides combine the logistical requirements of the System to provide maximum supportability, System readiness and cost effectiveness. Integrated Support Guides are designed as "living documents" and contain the level of detail required for integrated support planning and System design at a specific phase of the acquisition life cycle. They shall include items necessary for transition to the next phase in the System life cycle. Design tradeoffs and risk analyses shall be included in the first versions of the plans and be refined during the development and implementation phases of the life cycle. The BLM will monitor Target System Contractor(s) logistical planning activities to ensure that they are integrated into the system engineering and design process.

9.6 Maintenance Support

Task Manager: M. Kirby SC-311

The BLM will monitor Target System Contractor's maintenance support provided to the BLM until the Functional Configuration and Physical Configuration Audits have been accomplished, and the Target System has been certified, accepted, and transferred to the Bureau.

The nature of Contractor(s) maintenance support that the BLM Logistics Manager as assisted by all Site Managers will monitor, includes maintenance of support equipment (such as testing and diagnostic devices) and installed equipment (such as computers and tape drives). It will be the practice of BLM to examine the Target System Contractor(s) standardized forms used to document maintenance actions, throughout the System Life Cycle starting with development test and evaluation, and ending with site acceptance by the BLM.

The BLM will be responsible for the maintenance of all Government Furnished Equipment (GFE).

The BLM will monitor the maintenance support provided by Target System Contractor(s) to ensure that it is consistent with the staged installation schedule for the Target System. BLM will verify that as part of the Integrated Support Guide, the Target System Contractor(s) includes preoperational logistical support plans that identify all actions required to provide optimum maintenance support for the preoperational System.

The BLM will ensure that the Integrated Support Guide includes maintenance response provisions and guarantees that the Target System Contractor(s) provides maintenance support according to the schedule provided in the Integrated Logistics Functional Guide.

9.7 Supply Support

Task Manager: M. Kirby SC-311

BLM Logistics Manager and Site Managers will monitor that the Target System Contractor(s) provides supply support to the BLM until the Functional Configuration and Physical Configuration Audits have been accomplished, and the Target System has been certified, accepted, and transferred to the BLM.

The support monitored includes, as a minimum, the provision of spare parts, support equipment, and other as-required supplies and materials. The BLM will ensure that the Contractor(s) provide that the required spare parts are acquired, delivered, and available at each designated site.

The Integrated Support Guide includes preoperational supply support consideration for the Target System. Approved supply support plans will be utilized as the basis for all supply support actions during the preoperational phase of the life cycle.

After formal certification and acceptance of the Target System, the BLM will provide Target System supply support and/or procure a Supply Contractor for this purpose.

9.8 Technical Data and Information

Task Manager: M. Kirby SC-311

Technical data and information generated by the Contractor(s) shall be provided to the BLM for distribution in accordance with BLM Document Management Procedures. The BLM Logistics Manager will ensure that relevant technical data and information from the Contractor is delivered to the BLM and supporting contractors prior to deployment of the Target System. These data and information will be used to support implementation-related activities such as facilities preparation, transition, installation, integration, testing, configuration management, training, logistics support, etc. As a minimum, the BLM will formally review for acceptance/rejection the following information from the Target System Contractor(s) in accordance with BLM Document Management and Configuration Management Procedures:

a. As-Built Drawings. Drawings of site facilities, utilities, and existing equipment which when redlined and maintained support the overall implementation effort.

b. Interface Control Drawings. Drawings, when validated, redlined, and maintained, establish communications baselines for both internal and external BLM communications links throughout the Target System development and deployment phases.

c. System Description Document. A comprehensive system description of the Target System environment includes hardware, software, and communications designs as well as the overall architecture of the system. Deliverable for formal BLM review is a comprehensive System Description Document at System certification and acceptance.

d. Technical References and Manuals. BLM shall monitor, and formally review all technical references and manuals used and/or required produced by the Contractor(s) during the implementation and operation phases of the life cycle. Technical references and manuals will be examined by SC-311 to ensure that they meet BLM contractual requirements.

9.9 Packaging, Handling and Transportation

Task Manager: M. Kirby SC-311

It will be the responsibility of all BLM Site Managers to ensure that the Contractor has assured that all contract deliverables are adequately packed, transported and stored to protect against corrosion, deterioration, and/or physical damage during shipment and handling. The Contractor(s) shall consult with the BLM in all cases where nonstandard packing, transporting or storing practices are proposed. BLM will examine all contract deliverable items to inspect for damages, deterioration, or losses incurred during shipment, handling, and/or installation owing to negligence on the part of Contractor(s).

9.10 Skills Acquisition

Task Manager: M. Kirby SC-311

Refer to the People and Organization section of this Master Plan for skills acquisition and related activities.

Task Title: 9.1 Integrated Logistics Support and Coordination April, 1990

Task Manager: M.Kirby SC-311

Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
9.1.1	Policy Decision to Delegate Dev Prep and Implementation of ILSG to SC-310	Moeller	WO-700 Staff, SC-310 Staff	2/90	4/90		Written Policy Memo	Memo issued	
9.1.2	Write PD for Logistics Support Managers	Bright		3/90	3/90	PO 2; T 2, 3, 7, 8; DM 1, 2, 4, 6-8; 9.1.1	PD for Logistics Support Manager	Draft PD sent to Hofman	
9.1.3	Review Logistics Support Manager PD	Hofman	Herrington, Sedbrook	4/90	5/90	9.1.2		Reviewed draft PD sent to Bright	
9.1.4	Submit Draft Logistics Support Manager PD to Personnel for Classification	Bright		5/90	7/90	9.1.1, 9.1.2, 9.1.3	Reviewed draft PD for classification	Sent to personnel	
9.1.5	Approve Logistics Support Manager PD	Murphey	Personnelist(s)	8/90	8/90	9.1.4	Classified PD	Classified PD sent to Bright	
9.1.6	Designate SC Logistics Support Manager	Conn	Money	9/90	9/90	9.1.5	Formal memo	Memo issued	
9.1.7	Designate WO Logistics Support Manager	Webber	Anderson	9/90	9/90	9.1.5	Formal memo	Memo issued	
9.1.8	Form Logistics Support Working Group	Bright	Site Managers	4/90	4/90	TA 5, 6	Master Plan Chapter 9 reviewed	Implement MP tactical integrated logistics support guide	
9.1.9	Select SC-300 Staff for Training as Facilitated	Conn	Money, Strong, Leopold			Available training slots between 4/90 and 9/90	Formal memo	Training received	

Task Title: 9.1 Integrated Logistics Support and Coordination

April, 1990

Task Manager: M.Kirby SC-311

Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
9.1.10	Prepare Draft Charter for Integrated Logistics Support Working Group	Bright	ILS Working Group			9.1.8; PO 2; T2, 3, 7, 8; DM 1, 2, 4, 6-8	Draft charter	Draft charter sent to IRMAC	
9.1.11	Review Draft Charter	Kirby	IRMAC Working Group			9.1.10	Reviewed draft charter	Draft charter back to Bright	
9.1.12	Ratify Draft ILSWG Charter	Kirby				9.1.11	Ratified charter	Ratified charter back to Bright	
9.1.13	Prepare Integrated Logistics Support Guide (ILSG)	Bright				Follow FAR Part 7 Policies and Procedures	Integrated Logistics Support Guide	Draft Guide produced	
9.1.14	Conduct Formal Review of ILSG	Conn	ILSWG	1/91	1/91	Review <30 Days	FRR	Guide and FRR sent to Conn for decision	1-2 week review 1 week prep FRR 1 week prep FRR
9.1.15	Make Decision of Accept/Reject of ILSG on Basis of FRR	Conn				Decision must be made in < 1 week	Make formal decision of accept/reject	Formal decision	
9.1.16	Implement the ILSG	Conn	SC-310, Site Managers	2/91	2/99	Policy decision delegations implementation of ILSG to SC-310	Formal memo	Memo issued	

Task Title: 9.2 Manage Logistics Support

Task Manager: M.Kirby SC-311

Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
9.2.1	Manage Logistics Support	SC-310	SC-310	1/90	2/99	Policy Decision from 9.1			

Task Title: 9.3 BLM Site Support

Task Manager: M. Kirby SC-311

Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
9.3.1	WO Purchases/Provides Site Support Items for WO Site for Target System Contractor	Kirby	WO Procurement Staff, SC-310, SC-652B	2/91	2/99	Purchased/Provided Items Must be Coordinated via AWP through SC-310 per 9.2	POs, Requisitions, AWP Directives		
9.3.2	SC Purchases/Provides Site Support Items for SC Site for Target System Contractor	SCD	SC Procurement Staff	2/91	2/99	Purchases/Provided Items Must be Coordinated via AWP through SC-310 per 9.2	POs, Requisitions, AWP Directives		
9.3.3	SOs Purchases/Provide Site Support for all State Sites for Target System Cont.	SDs	SO Procurement Staffs	2/91	2/99	Purchases/Provided Support Items Must be Coordinated via AWP through SC-310 per 9.2	POs, Requisitions, AWP Directives		
9.3.4	SC Coordinates and Reviews all Purchases and Provided Items for Consistency W/H Target System Contract	Money	SC-310, SC-652	2/91	2/99	9.1.1	Monthly Purchase/ Provision Accounting Reports		

Task Title: 9.4 GFE/GFP Maintenance and Support

Task Manager: M. Kirby SC-311

Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
9.4.1	Contractor Identifies Existing Usable H/W and/or S/W That He Wants to be Made Available for System Installation	Target System Contractor	Contractor Staff	2/91	5/91	Contract Award; T 2, 3, 7, 8	Memo Identifying Existing Usable H/W and/or S/W to BLM		
9.4.2	BLM Notifies WO, SC, SOs of Existing Usable H/W and/or S/W That Will be Made Available to Contractor	Money	SC-310 Staff	5/91	5/91	9.4.1	Memo to all Offices		
9.4.3	WO Purchases/Provides GFE/GFP for WO System Installation	Moeller	WO Procurement Staff	5/91	2/99	GFE, GFP must be Purchased, Provided via AWP Through SC-310 per 9.2	POs, Req. AWP Directives		
9.4.4	SC Purchases/Provides GFE, GFP for SC System Installation	Conn	SC Procurement Staff	5/91	2/99	GFE/GFP must be Purchased/Provided via AWP Through SC-310 per 9.2	POs, Reqs, AWP Directives		
9.4.5	SO Purchases/Provides GFE/GFP for State System Installation	SDs	SO Procurement Staff	5/91	2/99	GFE, GFP must be Purchased, Provided via AWP Through SC-310 per 9.2	POs, Reqs, AWP Directives		

Task Title: 9.5 Logistics Planning

Task Manager: M. Kirby SC-311

Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
9.5.1	Monitor Contractor ILSG Support to BLM	Money SDs	SC-310; Site Managers	2/94	2/99	1. First ILS Report @ PDR 2. Other ILS as Requested	1. ILS Analysis Reports 2. ILS Plans		

Task Title: 9.6 Maintenance Support

April, 1990

Task Manager: M.Kirby SC-311

Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
9.6.1	Policy Decision Made About Whether BLM Will Maintain Target System Post-Acceptance or Whether it Will Contract Maintenance Out	Moeller	WO-700 Staff	2/91	2/91		Memo Formally Stating Policy Decision		
9.6.2	Monitor Contractor Maintenance Support	Kirby	Site Managers	2/91	9/99	1. Support is Complete Post-FOC and Maintenance is Transferred to BLM 2. System is Certified, Accepted	ILSP (Maintenance Analysis)		
9.6.3	Provide Maintenance of GFE	Kirby	Site Managers; SC-300, WO-700	2/91	9/99				

Task Title: 9.7 Supply Support

April, 1990

Task Manager: M. Kirby SC-311

Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
9.7.1	Monitor Contractor's Supply Support	Money	ILSWG; SC-310; Site Managers	2/91	9/99	1. Support is Complete Post-FOC and Maintenance is Transferred to BLM 2. System is Certified, Accepted	ILSG (Maintenance Analysis)		

Task Title: 9.8 Technical Data and Information

April, 1990

Task Manager: M. Kirby SC-311

Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
9.8.1	Monitor Contractor's Submission of Tech Data and Information	Money	ILSWG; SC-310; Site Managers	2/91	9/99	1. Document Management Policy 3/27/89 Procedures 2. Configuration Management Policy (Procedures); TA 5, 6; DM 8	1. As-Builts 2. Interface Control Drawings 3. System Description Document 4. Technical References and Manuals		
9.8.2	Distribute Tech Data and Information	Money	SC-310; Site Managers; ILSWG ILP Group	2/91	9/99	Same as 9.8	Same as 9.8		

Task Title: 9.9 Packaging, Handling and Transportation

Task Manager: M. Kirby SC-311

Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
9.9.1	Monitor Contractor to Assure That Contract Deliverables are Adequately Packed, Transported and Stored	Kirby	Site Managers	2/91	2/99	1. Contractor will Consult with BLM if Non-Standard Practices for Same are Proposed 2. Contractor is Fully Liable for Damages due to Negligence			

10 Target System Configuration Management

Configuration Management is the creation and enforcement of procedures and standards to establish a compatible, Bureauwide computer environment. This encompasses the development of the system, installation and maintenance of operating systems, hardware, software, and data communications.

A. Assumptions-

- o BLM will develop a Configuration Management Policy (CMP) to guide Bureauwide ADP systems development. Adoption of the CMP is predicated upon Washington Office IRMAC, State Office, Field Committee, and Service Center acceptance of the CM requirements specified in the CMP.

B. Policy Considerations-

- o The Target System CMP should serve as the guide for CM policy, procedures and standards for ADP activities at all levels of the BLM.

10.1 Configuration Management Planning

Task Manager: M. Kirby SC-311

The Modernization Program CM Manager will develop a comprehensive Target System Configuration Management Guide (CMG) to guide modernization configuration management activities. The CMG will cover BLMs CM activities over the entire Life Cycle, including design, development, installation, operation and maintenance.

A. Assumptions-

- o BLM will prepare the Target System Configuration Management Guide (CMG) in accordance with the provisions of the BLM CMP.

B. Policy Considerations-

10.2 Target System Configuration Management, Monitoring and Coordination

Task Manager: M. Kirby SC-311

The Modernization Program CM Manager will establish a formal configuration Management Working Group (CMWG). The CMWG will provide guidance to the pilot site(s) coordinators and SO IRM Chiefs, and monitor and coordinate CM activities between the Service Center and designated BLM sites.

The BLM will exercise Configuration Management and control over the Target System design, development, operation and maintenance as identified in the CMG. The BLM must ensure that the Contractor's CM program and activities are consistent with Target System CMG.

A. Assumptions-

- o Target System CMG will be in effect prior to the contract award.

B. Policy Considerations-

10.3 Contract-Related Configuration Management Activity

The Division of Modernization will monitor the Contractor's development of a Contractor Configuration Management Plan (CCMP) which includes Target System CM tasks, responsibilities, procedures and control functions as defined in the Target System contract and Statement of Work (SOW).

A. Assumptions-

- o Target System contract and SOW will clearly state contractor requirements for developing a Contractor Configuration Management Plan and reference the BLM Target System contract and Statement of Work (SOW).
- o The Contractor, in conjunction with various divisions at the Service Center, will define the Target System functional configuration identification or "baseline" for the Target System.
- o The Contractor, in conjunction with various divisions at the Service Center will establish the Target System allocated baseline.
- o At the conclusion of the design and development phase the Contractor, in conjunction with various divisions at the Service Center, will establish the Target System product baseline.
- o The BLM will be responsible for overall Target System configuration control.
- o The Contractor will conduct a physical configuration audit (formal examination) of Target System "as-built" configuration items, to compare and assure compliance with the technical documentation.
- o The Contractor will conduct a functional configuration audit of the Target System.
- o The BLM will perform Formal Qualification Reviews throughout the acquisition life cycle of the Target System contract.
- o The BLM and the Target System Contractor are jointly responsible for implementing and performing Configuration Status Accounting activities.

B. Policy Considerations-

Functional Baseline

BLM will monitor the Contractor's completion of the functional baseline and will provide input before System Design Review (SDR) and the start of system design and development.

Allocated Baseline

The Contractor, in conjunction with the BLM, shall develop the Target System allocated baseline prior to the preliminary design review (PDR).

This activity marks the end of the Target System design and development phase and the beginning of the implementation phase of the life cycle.

Product Baseline

The BLM will monitor that the Contractor's Product Baseline Hardware Configuration Items (HWCI) and Computer Software Configuration Items (CSCI) satisfy applicable test documentation criteria, such as in-plant test plans and procedures, and meet the requirements specified in the Target System contract and SOW, and Target System Test and Evaluation Guide (TEG).

Configuration Control

The BLM will ensure that Configuration control, the formal process of governing changes to functional, allocated, and product baselines to correct discrepancies identified at the functional configuration audit (FCA), physical configuration audit (PCA), and formal qualification reviews (FQRs) is approved. Approved changes to baselines will be incorporated into the applicable documentation or system design element.

Physical Configuration Audit

The BLM will monitor the Contractor's performance of the physical configuration audit (PCA), a detailed audit of engineering drawings, specifications, technical data, and tests utilized in the production of HWCIs. The PCA also entails detailed audits performed on design documentation, computer listings and technical manuals for CSCIs.

Functional Configuration Audit

The BLM will monitor the Contractor's functional configuration audit (FCA) that verifies that actual performance of configuration items conform to their respective hardware and software development specifications. Test data confirms that system segment configuration items perform as individual components (as requested by their Functional/Allocated Baselines) and are capable of integrated performance. The FCA is conducted at the end of the design and development phase of the life cycle.

Formal Qualification Review

The BLM will perform Formal Qualification Reviews (FQR) throughout the System Life Cycle in order to verify that configuration items meet all specific performance requirements of the Target System Contract.

Configuration Status Accounting

Configuration Status Accounting (CSA) is the recording and reporting of the information required for effective configuration management. Examples include the status of proposed changes to the configuration and the implementation status of approved changes. CSA formats, schedules and data must be specified in the BLM Target System CMP.

Subcontractor/Vendor Control

The BLM will monitor Target System Contractor control over subcontractors and vendors to ensure that they have incorporated necessary Integrated Logistics Support (ILS) requirements to ensure that delivered configuration items meet Target System contract specification.

Task Title: 10.1 Configuration Management Planning

April, 1990

Task Manager: M. Kirby SC-311

Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
10.1.1	Prepare Draft Target System CM Guide (CMG)	Money	Rhinehart	10/1/89	5/1/90	SC-310, SC-320, WO, Field Committee, SO	Draft TS CMG	Guide Acceptance	
10.1.2	Finalize TS CMG	Money	Rhinehart	6/1/90	8/10/90	SC-310	Final TS CMG	Final Guide of Acceptance	
10.1.3	Initiate BLM Site CM Guide Preparation	Kirby	Kirby	8/15/90		SO, SC, WO	Site CM Guide Drafts	BLM Site CM Guide Draft Acceptance	
10.1.4	Finalize BLM CM Guide	SO, WO, SC		1/15/91	10/1/91	SC-311	Final Site CM Guide	BLM Guide Acceptance	

Task Title: 10.2 Target System Configuration Control

Task Manager: M. Kirby SC-311

Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
10.2.1	Review Target System Contractors CM Program before Implementation	Money	Kirby	A + 60		BLM TS CMG	Proposed CM Program Guide	Approval	
10.2.2	Monitor TS Contractor CM Activities	Money	Kirby	Through out life of contract		BLM TS CMP	None	Acceptable Performance	
10.2.2.1	Assure TS Contractor Compliance with BLM TS CMG	Money	Kirby	A + 60		Task 12.2	TS Contractor CM Guide	Guide Acceptance	

Task Title: 10.3 Contract-Related Configuration Management Activity

April, 1990

Task Manager: L. Money SC-310

Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
10.3.1	Monitor Preparation of Functional Baseline	Money	Kirby	Before SDR			Baseline Document	Acceptance	
10.3.2	Prepare Allocated Baseline in Conjunction with Target System Contractor	Money	Kirby Target System Contractor	After SDR Prior to PDR	End of SD&D Phase	10.3.1	Baseline Document	Acceptance	
10.3.3	Monitor Product Baseline Production	Money	Kirby	End of SD&D Phase	BLM Acceptance	10.3.2	BLM Acceptance Documentation	BLM Acceptance	
10.3.4	Implement Bureauwide Configuration Control	Moeller	Money	Throughout Life of Contract		10.2; 10.3.2	Configuration Change Documentation	Change Acceptance	
10.3.5	Monitor Contractor's Physical Configuration Audit of the Target System	Money	Kirby	Throughout Life of Contract		10.3.4	Audit Documentation	Acceptance	
10.3.6	Monitor Contractor's Functional Configuration Audit of the Target System	Money	Kirby	End of SD&D Phase		10.3.4, 10.3.5	Audit Documentation	Acceptance	
10.3.7	Perform Formal Qualification Reviews	Money	Kirby	Throughout Life of Contract		10.3.4	Verification Documentation	Acceptance	
10.3.8	Implement Configuration Status Accounting	Money	Kirby Target System Contractor	Throughout Life of Contract		10.3.4	Status Reports	Approvals	

Task Title: 10.3 Contract-Related Configuration Management Activity

April, 1990

Task Manager: L. Money SC-310

Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
10.3.9	Monitor Target System Contractor's Subcontractor/Vendor Control Practices	Money	Kirby	Through out Life of Contract		10.2	Plans and Control Documentation	Acceptance	

11 Modernization Program Quality Assurance

This section presents the activities and responsibilities required to implement the Target System Quality Assurance Program which consists of a planned and systematic sequence of all actions necessary to provide adequate confidence than an item or product conforms to established technical requirements and the procedures involved with maintaining the accuracy and integrity of a computer system as well as the accuracy of the data being processed by the system.

A. Assumptions-

- The Modernization Contractor will take the lead role in performing detailed QA engineering during the system development process, while the BLMs role will be one of monitoring both the Contractor's development and the BLMs implementation activities throughout the life cycle.
- The Contractor will be responsible for ensuring that all deliverables meet requirements and are fit for use, regardless of the BLMs QA activities.
- The Contractor will also be responsible for corrective actions and status reporting as detailed in the contract, the SOW, and other pertinent documents.
- The BLM will perform detailed QA engineering of deliverables for which it has assumed ownership.
- The primary source of guidance on Modernization Program QA will be the Modernization Program QA Manager, while authority for enacting the QA Manager's recommendations will reside with the Modernization Program Manager and the SO IRM chiefs. Authority for overall BLM QA policy and directives will remain with the Director of the Bureau.

B. Policy Considerations-

- Overall BLM policy and directives are needed to link Program specific QA activities into a coherent BLM QA program.
- Overall BLM QA policy and directives must comply with the QA provisions of the Federal Acquisition Regulations (FAR) Part 46. They must recognize the practices accepted as current industry standards (as delineated in such sources as the DOD or ANSI standards, or such authorities as William Perry and others). They must also place the onus for Quality on BLM management, where it belongs (see Risks).

11.1 Quality Assurance Planning

Task Manager: M. Kirby SC-311

The Modernization Program QA Manager will develop and maintain a Quality Assurance Guide (QAG) that identifies the Modernization Program quality standards, factors, methods of measurement and compliance criteria. The QAG will be linked to overall BLM policy, and will cover the monitoring of Modernization Program development and implementation activities for overall compliance.

11.2 Quality Assurance Monitoring and Coordination

Task Manager: M. Kirby SC-311

The Modernization Program QA Manager will establish a formal Quality Assurance Working Group (QAWG). The QAWG will provide guidance to the Pilot Site(s) Coordinator(s) and SO IRM Chiefs, and monitor and coordinate QA activities between the Service Center and designated BLM sites.

The Modernization Program QA manager will monitor all Modernization Program Contractor's QA activities, and determine whether they are performed in accordance with the Modernization Program Contract SOW, QAG, and other applicable documents.

The Modernization Program QA manager will also monitor BLM implementation activities to determine if they meet the quality goals of the Modernization Program.

The Modernization Program QA Manager will provide status reports and risk analyses to the Modernization Program Manager and the SO IRM Chiefs for their consideration.

11.3 Quality Assurance Reviews, Audits and Inspections

Task Manager: M. Kirby SC-311

The QA manager will perform QA Audits and Inspections that involve observation, measurement, and evaluation of Modernization Program Contractor(s) engineering activities, including the development, testing, and installation of hardware, software, and data. QA Reviews, Audits and Inspections will determine if applicable documentation and traceability for each configuration item have been established and retained for accountability and historical purposes in accordance with Modernization Program Configuration Management Procedures.

11.4 Contractor Quality Assurance Planning

Task Manager: M. Kirby SC-311

The contractor QA activities will cover hardware, software, and data installation at all designated BLM sites and will be included in the Contractor's QA Plan. The BLM will monitor the Modernization Program Contractor(s) QA engineering activities to ensure that they comply with the Target System SOW and other applicable documents.

11.5 Contractor Quality Assurance Engineering

Task Manager: M. Kirby SC-311

The BLM will examine all QA status reports provided and monitor all corrective actions undertaken by the Contractor to ensure compliance with requirements. The BLM will monitor the Modernization Program Contractor(s) detailed QA engineering to ensure that they comply with the SOW, the QAP, and other applicable documents.

11.6 Corrective Actions

Task Manager: M. Kirby SC-311

Corrective Actions to resolve problems or deficiencies in the Target System configuration will be implemented by the Modernization Program Contractor(s) to bring the System into compliance with the Contract, SOW, and other relevant documents. Corrective Actions shall be monitored by the Contractor to ensure their execution and documentation and the creation of an audit trail establishing traceability to the end Configuration Item or Baseline. The contractor QA Manager shall report the status of all corrective actions to the BLM. The BLM will provide requests for corrective action as necessary and will monitor the Contractor's resolutions of the requests.

11.7 Status Reporting

Task Manager: M. Kirby SC-311

QA Status Reporting involving the reporting of information required for effective QA (including corrective action changes to baselines and development/implementation status) will be provided by the Modernization Program Contractor(s). Data and format specifications for QA Status Reporting will be contained in the Contractor's QA Plan. The Modernization Program QA Manager will review the Contractor's QA Status Reports and utilize the information in managing BLM QA activities.

Task Title: 11.1 Quality Assurance Guide

Task Manager: M.Kirby SC-311

Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
11.1	Quality Assurance Guide	SC-311 Other Staff	Probert Clerical Support as Needed	Already Started	On-going	Formation of QA Working Group	QAG	Approval by L. Money	

Task Title: 11.2 Quality Assurance Monitoring April, 1990

Task Manager: M.Kirby SC-311

Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
11.2	Quality Assurance Monitoring	SC-311 Other Staff	Probert Other Staff	Award	On-going	Contractor Activities			

Task Manager: M.Kirby SC-311

Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
11.3	Quality Assurance Audit Inspection	SC-311 Other Staff	Probert Other Staff	Award	On-going	Contractor Activities			

Task Manager: M.Kirby SC-311

Step Order	Action Steps	Repsonsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
11.4	Contractor Quality Assurance Planning	SC-311	Contractor/QA Manager	Award	On-going	Other Contractor Planning Contractor Activities	QA Plan	Review	

Task Title: 11.5 Contractor Quality Assurance Engineering

Task Manager: M.Kirby SC-311

Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
11.5	Contractor Quality Assurance Engineering	SC-311	Contractor/QA Manager	Award	On-going	Contractor QA Plan, Contractor Activities			

Task Title: 11.6 Correction Action

April, 1990

Task Manager: M.Kirby SC-311

Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
11.6	Correction Action	SC-311	Contractor/QA Manager	Award	On-going	Contractor QA Plan, Contractor Activities			

Task Title: 11.7 Quality Assurance Status Reporting

April, 1990

Task Manager: M.Kirby SC-311

Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
11.7	Quality Assurance Status Reporting	SC-311	Contractor/QA Manager	Award	On-going	Contractor QA Plan, Contractor Activities	Reports	Review	

12 Target System Security

A. Assumptions-

- In coordination with the Target System Computer Security Working Group, a System Security Engineering Plan (SSEP) will be developed for each individual site which will outline site security requirements, including personnel, physical, communications and technical.

- Sensitive data, and/or data elements, which must be protected, will be identified by each System/Data Owner. Each Owner, or his duly authorized representative, will control who has access to the system, data and/or data element, including what level of access each shall have (i.e., read, write, etc.)

- Site and/or system security requirements will be as outlined in the Department Directive listed in B, below. These include the requirements for position sensitivity designations for all Bureau and contract positions, obtaining required investigations for personnel occupying those positions, physical security requirements for facilities and ADP equipment (mainframe, mini and micro computers), communications, including dial-back security for dial-in lines, etc.

B. Policy Considerations-

- The SSEP must conform to the Target System Security policy and the following Department of Interior Manuals:

  ADP Standards Handbook (306 DM), ADP Security Program, Release Number Handbook 306-3, dated May 19, 1980.

  375 DM 19, IRM Information Resources Security Program, Release Number 2715, dated November 6, 1986.

  376 DM 12, IRM Microcomputers, Workstations, and Small Computer Networks, Release Number 2779, dated February 17, 1988.

  441 DM 1-6, SECURITY, Personnel Suitability and Security Investigative Requirements, Release Number 2864, dated July 17, 1989.

- The SSEP must conform to the Freedom of Information Act (FOIA) policies, guidance, and legal requirements.

12.1 Security Engineering Planning

Task Manager: M. Kirby SC-311

The BLM SSEP defines the System Security Engineering (SSE) Program for the Target System acquisition process. SSE implements the BLM and Department of Interior security policy for the protection of data, ADP systems, physical, personnel, procedural, and communications security. The SSEP defines management responsibilities and schedules of security activities.

Target System data security requirements will include, among other things, the following items:

a. Preventing unauthorized disclosure of data.

b. Minimizing risk of unauthorized modification, loss, destruction or corruption of data.

c. Minimizing the risk of unauthorized delay or withholding of data or the processing of the data by any unauthorized party.

The Service Center, in conjunction with the Washington Office, will issue a Target System Security Policy which defines the initial baseline from which subsequent security requirements and policies are derived. These will include: ADP security controls to be implemented within the environment of the Target System; administrative controls on assigned personnel; physical controls on resources via the facility design criteria; and security training and awareness requirements. BLM Security Policies and Specifications, and other appropriate security-related items will be contained in the applicable facilities and ADP documentation at each designated site.

During the system development phase of the life cycle, the BLM will review, approve and certify the Target System Contractor(s) ADP System design and "as-built" code after being assured that they conform with U.S. Government security requirements, policies, and laws.

12.2 Site Security Analysis and Planning

Task Manager: M. Kirby SC-311

The physical attributes of each designated BLM site will be defined in the Facilities Floorplans and Facilities Preparation Inventory Datasheets prepared by each Site Manager. These surveys shall be reviewed by the Target System Contractor as part of their Site Preparation and Installation Plans(s), and potential security problems or deficiencies inherent in the physical structure or layout of buildings shall be identified, documented and mitigated in each Site Preparation and Installation Plan (SPIP). These SPIPs will be used by the BLM to define additional ADP security requirements for the Target System.

12.3 Security Monitoring and Control

Task Manager: M. Kirby SC-311

BLM personnel responsible for security implementation will continue analytical studies and reviews of existing and planned security architectures throughout the design, development, installation, and operation and maintenance phases of the Target System. The continuing visibility into the evolving security baseline will provide the information base and tools necessary to recommend viable alternatives and efficient corrective actions to ensure the applicable security requirements are achieved and maintained throughout the system life cycle.

12.4 Contractor Security Engineering

Task Manager: M. Kirby SC-311

The BLM will monitor the Target System Contractor's System Security Engineering Plan and organizational structure. The BLM will review each SSEP for approval/rejection consistent with policy, procedures, and directives. The BLM will ensure that the Target System Contractor personnel are cognizant of the Security Engineering process for managing Contractor Security Engineering activities throughout the system acquisition Life Cycle.

12.5 Interim Approval to Process

Task Manager: M. Kirby SC-311

TBD

12.6 Final Designated Approving Authority (DAA) Accreditation

Task Manager: M. Kirby SC-311

TBD

Task Title: 12.1 Security Engineering Planning

April, 1990

Task Manager: L. Money SC-310

Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
12.1.1	Prepare System Security Engineering Guide	Money	J.Bright/ C.Wood	3/90	6/90	WO, SC-320, SC-340, State Office	SSEP	Acceptance	

Task Title: 12.2 Site Security Analysis and Planning

Task Manager: L. Money SC-310

Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
12.2.1	State Offices Contact Floorplans and Datasheets	SO Site Managers		TBD			Survey Report	Acceptance	
12.2.2	Site Survey Reviews by TS Contractor	TS Contractor		TBD			Report Recommendations	Acceptance of changes made to SPIPs	
12.2.3	Prepare and Maintain Site Preparation and Installation Plans (SPIP)	TS Contractor, SO, SC-310		TBD			SPIPs	Completion of SPIPs	
12.2.4	Perform continuing study and review of security architecture throughout the life cycle of the TS	SC-310, SO, WO		TBD			Detection of Deficiencies	Correction of Deficiencies	

13 Target System Test and Evaluation

This section includes the requirements and responsibilities for Target System Test and Evaluation (TE) activities.

A. Assumptions-

- The Service Center will develop guidelines for Target System Test and Evaluation activities in accordance with BLM TE policy.
- The Target System will be developed in segments and acquired incrementally.
- Each segment will be integrated with previously developed segments to add new functions and capabilities to the Target System.
- Developmental Test and Evaluation (DT&E), including informal and formal testing, will be conducted by the Contractor in an approved test facility. The Contractor will verify that each segment fulfills its requirements.
- Operational Test and Evaluation (OT&E) of the Target System will be conducted by the BLM with the support of the Contractor at the Pilot Sites.
- Certification of the Target System will be on a site-by-site basis.
- While individual segments/sites may be conditionally accepted, final acceptance will not occur until the total system has successfully reached Full Operational Capability (FOC).

B. Policy Considerations-

- A comprehensive BLM Test and Evaluation Policy will be required to guide Target System and follow-on ADP acquisitions.

13.1 Test and Evaluation Guide

Task Manager: M. Kirby SC-311

The Modernization Program TE Manager will develop and maintain a Target System Test and Evaluation Guide (TEG). The TEG will define testing roles and responsibilities, objectives, activities, and risk management procedures to be followed during the acquisition phase of the Target System life cycle.

13.2 BLM Test Monitoring and Coordination

Task Manager: M. Kirby SC-311

The Modernization Program TE Manager will establish a formal Test Planning Working Group (TPWG). The TPWG will provide guidance to the Pilot Site(s) Coordinator(s) and SO IRM Chiefs, and monitor and coordinate Operational Test and Evaluation activities between the Service Center and designated BLM sites.

The Modernization Project TE Manager will ensure that Contractor(s) Development Test and Evaluation activities are performed in accordance with the Target System Contract SOW, and other applicable documents.

A. Assumptions-

- The BLM will designate a responsible Modernization Project TE Manager to oversee Target System TE activities, implementation of the TEG, and act as a point of contact between BLM and the Target System Contractor for Test and Evaluation activities.

B. Policy Considerations-

- The role and responsibilities of the Modernization Project TE Manager should be contained in the BLM TEP.

13.3 Contractor Test and Evaluation Planning

Task Manager: M. Kirby SC-311

The BLM will review the System Test Plan (STP) prepared by the Contractor to ensure that it is consistent with the Modernization Contract SOW and other applicable documents.

13.4 Developmental Test and Evaluation

Task Manager: M. Kirby SC-311

The BLM will monitor Contractor performance of Developmental Test and Evaluation (DT&E) to ensure compliance with the Contract, SOW, and other applicable documents. The DT&E process will proceed from unit testing through system testing. BLM will monitor the process to ensure that all identified discrepancies are corrected through the Contractor's corrective action process (Subchapter 11.5) and the unit(s) retested prior to incorporation in the product baseline. BLM will review DT&E documentation to ensure that it is prepared and submitted in accordance with the TEG, STP and BLM Document Management Guide.

The BLM will ensure that Target System Contractor has demonstrated that all allocated requirements have been fully satisfied for each phase of the test program. BLM will ensure that all documentation generated from test activities will be available, reproducible, and certified according to the provisions of the TEG, and form components of formal review activities such as Physical Configuration Audit, Functional Configuration Audit, and Formal Qualification Review.

13.5 Operational Test and Evaluation

Task Manager: M. Kirby SC-311

With the assistance of the Contractor, the BLM will conduct Operational Test and Evaluation (OT&E) at the Pilot Sites. The Target System Contractor(s) shall assist Pilot Site test personnel in subjecting the Target System to thorough OT&E and demonstrate that System units operate in an integrated, operational system environment. BLM Site Managers will be responsible for OT&E that will be conducted prior to field installation, and verified on-site through Field Testing.

13.6 Field Testing

Task Manager: M. Kirby SC-311

The BLM will monitor the installation and testing of the Target System by the Contractor at all designated BLM field sites and ensure that installations meet the requirements defined in the SOW, System Specification, and other applicable documents.

13.7 Independent Verification and Validation (IV&V) Activities

Task Manager: M. Kirby SC-311

The Division of Modernization may procure an Independent Verification and Validation (IV&V) Contractor to perform IV&V functions during the system design and development and integration phases of the life cycle, and to serve as advisors to the TPWG. The contract with the IV&V Contractor will specify IV&V evaluation criteria and the schedule of IV&V reports to be provided to the BLM.

The BLM will monitor the IV&V Contractor's performance of a comprehensive analysis of as-built Target System capabilities and ensure the Target System Contractor(s) adherence to the provisions of the SOW, System Specification, and other applicable documents.

The IV&V contractor will independently evaluate the engineering activities of the Target System Contractor(s) during the Test & Evaluation phase of the system acquisition. These independent evaluations will assess Target System design, Contractor(s) testing activities, and reviews of documentation and code. The IV&V contractor will independently test the Target System prior to certification and acceptance by the BLM.

IV&V results will be reported to the Division of Modernization; identified deficiencies and concerns will be resolved between the BLM and Target System Contractor(s) in a timely manner according to the provisions of the Target System contract.

Task Title: 13.1 Test and Evaluation Planning

Task Manager: L. Money SC-310

Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
13.1	Test and Evaluation Planning	SC-311	Probert Clerical Support as Needed	Started	On-going		Test and Evaluation		

Task Title: 13.2 BLM Test Monitoring and Coordination April, 1990

Task Manager: L. Money SC-310

Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
13.2	BLM Test Monitoring and Coordination	SC-311	TE Manager, Contractor	Award	On-going	Contractor Activities	System Test Plan	Review	

Task Title: 13.3 Contractor Test and Evaluation Planning

Task Manager: L. Money SC-310

Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
13.3	Contractor Test and Evaluation Planning	SC-311	TE Manager, Contractor	Award	On-going	SOW	Test and Eval Plan	Review	

Task Title: 13.4 Development Test and Evaluation

Task Manager: M. Kirby SC-311

Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
13.4	Development Test and Evaluation	SC-311	TE Manager, Contractor	Award	On-going	SOW, System Specs, STP	Test Documentation Reports	FQR	

Task Title: 13.5 Operations/Test and Evaluation

April, 1990

Task Manager: M. Kirby SC-311

Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
13.5	Operations/Test and Evaluation	SC-311	TE Manager, Contractor, Pilot Site Test Personnel	Award	On-going	SOW, System Specs, STP	Reports	IOC	

Task Title: 13.6 Field Testing

April, 1990

Task Manager: M. Kirby SC-311

Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
13.6	Field Testing	SC-311	TE Manager, Contractor, BLM Personnel	Award	On-going	SOW System Specs, STP	Reports	IOC	

Task Title: 13.7 IV&V Activities

Task Manager: M. Kirby SC-311

Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
13.7	IV&V Activities	SC-311	In-House Contractor	Award	On-going	Contractor Test and Evaluation	Reports		

14 Target System Certification and Acceptance

This section identifies BLM responsibility for certifying and accepting the fully integrated Target System in accordance with Department of Interior and other applicable Federal Government regulation standards and policies.

14.1 Acceptance Criteria Development

Task Manager: M. Kirby SC-311

The BLM will establish the certification and acceptance criteria for the Target System environment at the earliest possible date.

14.2 Site/System Certification

Task Manager: M. Kirby SC-311

The Division of Modernization will ensure that all changes resulting from OT&E, FCA, PCA and PIR evaluations have been implemented. Changes will be documented in accordance with the Document Management Plan. When the BLM has determined that the Target System installation at a designated site meets the requirements of the Target System Functional and System Specifications, the PIR Team will certify that site for Initial Operational Capability (IOC).

The Target System Contractor(s) will continue to provide technical assistance and integrated logistics support to the BLM until Full Operational Capability (FOC). ILS support will be provided by the Contractor(s) in accordance with the provisions of the Target System Integrated Logistics Support Plan (ILSP).

FOC certification will occur when each site has been fully operational and networked for (TBD) days and all corrective actions have been accomplished and relisted successfully. At FOC, the BLM will sign a Contractor(s) prepared Material Inspection and Receiving Report (MIRR) such as DD-250. The MIRR is an instrument to acknowledge BLM acceptance of delivered products, and that responsibility for maintenance, security, training, etc., transfers to the BLM. Instructions for completing DD-250 are contained in Federal Acquisition Regulation (FAR) paragraph 46.6 and Appendix I, DoD FAR Supplement. Provisions for completing DD-250 or a suitable MIRR will be included in the applicable Contractor(s) prepared documentation.

14.3 Initial Operational Capability

Task Manager: M. Kirby SC-311

BLM will determine the Initial Operational Capability (IOC) at a site when the Target System installation has successfully completed operational test and evaluation, is fully operational and all personnel are trained to manage, operate, maintain and/or support the Target System environment at that site. Only the formal certification/acceptance and/or DD-250 approval for the System is lacking at IOC.

14.4 System Transfer/Turnover

Task Manager: M. Kirby SC-311

The transfer and turnover of the Target System environment to the appropriate using organization (e.g., a State Office) will occur on a site-by-site basis. The Implementation Working Group (IWG) will assist in planning and implementing this process in an orderly manner. Transfer and turnover activities required to transfer/turnover the Target System to the BLM will be identified.

A transfer/turnover agreement between the BLM and the Target System Contractor(s) will specify the requirements and procedures for the transfer/turnover of responsibility for the operations and maintenance of the Target System from the Contractor(s) to the BLM.

14.5 Maintenance Responsibility Transfer

Task Manager: M. Kirby SC-311

After System transfer/turnover, the responsibility for providing Target System hardware and software maintenance will transfer from the Target System Contractor(s) to the Washington and State Offices and Service Center for sites under their jurisdiction. The BLM may elect to support these items itself, or procure Contractor support for this purpose. In addition, the Bureau may elect to continue to provide Target System communications network maintenance and support through a separate Contractor after System transfer/turnover. The SC may continue to support non-COTS software throughout its life cycle.

14.6 Full Operational Capability

Task Manager: M. Kirby SC-311

BLM will determine the Full Operational Capability (FOC) of the Target System when Target System installations at all designated sites are certified as fully operational; BLM personnel are trained to manage, operate, maintain and/or support the Target System environment at all sites; and formal certification and acceptance of the System is indicated by BLM signatures on a DD-250 or a comparable MIRR for the overall Target System.

Task ~~Title~~: 14.1 Acceptance Criteria Development

Task Manager: M. Kirby SC-311

Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
14.1	Acceptance Criteria Development	Kirby		TBD	TBD		Test and Evaluation		

Task Title: 14.2 Post Implementation Review

Task Manager: M.Kirby SC-311

Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
14.2	Post Implementation Review	Kirby		TBD	TBD				

Task Title: 14.3 Site/System Certification

Task Manager: M.Kirby SC-311

April, 1990

Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
14.3	Site/System Certification	Kirby		TBD	FOC	Test and Evaluation, IOC	Form Documentation		

Task Title: 14.4 Initial Operational Capability

April, 1990

Task Manager: M.Kirby SC-311

Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
14.4	Initial Operational Capability	SC-310		TBD	TBD				

Task Title: 14.5 System Transfer/Turnover

Task Manager: M.Kirby SC-311

Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
14.5	System Transfer/Turnover	SC-310	Contractor/ States	TBD	TBD				

Task Title: 14.6 Maintenance Responsibility Transfer

April, 1990

Task Manager: M.Kirby SC-311

Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
14.6	Maintenance Responsibility Transfer	SC-310	SC-340/States	TBD	TBD				

Task Title: 14.7 Full Operational Capability

Task Manager: M.Kirby SC-311

Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
14.7	Full Operational Capability	SC-310		TBD	TBD	Step 3			

15 Operations and Maintenance

This section provides the strategic guidance for establishing the operations and maintenance (O&M) requirements to sustain the Target System in the operational phase of the life cycle.

The purpose of O&M planning is to provide for successful ongoing Target System operations and maintenance after the BLM has accepted delivery of the Target System from the contractor.

A. **Assumptions-**

- A history of Target System operations and maintenance is maintained during the acquisition phase of the life cycle.
- Logistical support requirements during acquisition are carefully documented.
- Operational training requirements are defined prior to transfer and turnover.
- Provisions are made for providing ongoing user support, upgrading Target System capabilities, and accommodating required post-acquisition configuration changes.

B. **Policy Considerations-**

- Existing O&M policies should be reviewed in light of the final Target System configuration and associated training requirements.

15.1 Operations and Maintenance Analysis

Task Manager: L. Money SC-310

The Target System Contractor will conduct an analysis for maintenance requirements for all Target System components throughout the life cycle. The O&M Analysis shall include, at a minimum, an analysis of program/project management, hardware, software, data, records, network communications, security, configuration management, document management, test and evaluation, training, and quality assurance issues. It shall also include a position and skills analysis which identifies job positions and skills required to support the Target System at each designated facility. The position and skills analysis will be used by the BLM to revise its Training Needs Analysis, and shall include, at a minimum: types of positions; required skill levels; quantity of people at each position; new personnel acquisition schedule consistent with the phased deployment of the Target System; other organizational assignments and job responsibilities.

The position and skills analysis shall consider personnel requirements in the context of the System configuration and unique operational requirements at each designated site. The Contractor's analysis and recommendations will be evaluated by the BLM; additional planning may be required by the Bureau to address such issues as procuring the services of Facility Management Contractors or adding BLM staff at selected sites. Key positions and functional requirements to be addressed in this analysis shall include the following:

a. General Operational Support and ADP Management to be provided by the Washington and State Offices and Service Center for sites under their jurisdiction after Target System certification and acceptance. Each designated BLM site will provide their own operational and ADP management support. The Washington and State Offices and Service Center will be required to provide adequate support to sites under their jurisdiction to permit them to carry out the following functions at the level required by each site:

(1) Facilities management

(2) ADP and facilities security

(3) Data base management

(4) Records management

(5) Configuration management

(6) Site support management

(7) System chargeback/cost recovery

(8) Computer performance and planning

(9) Computer operations

(10) Hardware maintenance

(11) Communications network operations maintenance

b. Training Support. After certification and acceptance, the BLM will be responsible for securing the necessary training resources; establishing the general (Bureauwide) training needs of the Target System; and providing on-site and/or in-house training. Training activities will include:

(1) Bureauwide management training programs

(2) General instruction in the Target System environment

(3) New class planning and development

(4) Formal training for instructors

(5) Bureauwide course materials development and distribution

(6) Change control.

c. Technical Services Support. In the operation phase of the Target System life cycle, the Service Center will provide Bureauwide technical services in support of the Target System. These services will include: software development; modification of existing applications software; and configuration control of the Target System software. The Service Center will provide the following service functions:

(1) Bureauwide hot line support and technical consulting

(2) Technical information dissemination

(3) Software development, maintenance and modification

(4) System testing, installation, and maintenance

(5) System configuration control

(6) Systems operations support

(7) Change control.

d. Information Resource Management Support. After certification and acceptance, the Service Center will provide the following Bureauwide IRM support services:

(1) Quality assurance and quality control

(2) Configuration management and control

(3) ADP security management

(4) Change control

(5) Testing

e. Data Administration. During the implementation phase of the life cycle, the Division of Modernization will provide the following Bureauwide Data Administration services:

(1) Bureauwide data management and planning

(2) Bureauwide data administration

(3) Bureauwide data base development and maintenance

(4) Bureauwide data base operations and technical support

(5) Bureauwide data dictionary management

(6) Data administration quality assurance

f. Communications Management Support. During the conceptual, design and development and implementation phases of the Target System life cycle, the Target System communications network will be managed under BLMs control (SC-314 by the Contractor. The management of the network will be turned over to BLM (SC-343) in the operational phase of the life cycle. The SC will manage their LANs and the Interstate network. The SOs and BIFC will manage their LANs and WAN/intrastate network. The SC will manage data communication support services available from the Target System contract. At BLMs request the contractor shall provide the following data communications support:

(1) Bureauwide data communication management

(2) Bureauwide data communication technical support

(3) Bureauwide data communications performance and evaluation

(4) Bureauwide data communication operations

(5) Bureauwide data communication management

15.2 Operations and Maintenance Planning

Task Manager: J. Strong SC-340

The BLM will plan for the long-term management, operations and maintenance of the Target System after certification and acceptance. Based on the Target System Contractor's O&M Analysis, SC-340, in coordination with SC-310 and the State Offices, will prepare high level O&M Plans, which addresses the following Target System management issues:

a. Transition of operations and maintenance responsibilities for the Target System.

b. Defining the level of support required for the operations and maintenance of the Target System after System turnover. Decisions include the cost/benefits of acquiring a staff of Contractor(s) versus the use of BLM personnel to support the System during the operational phase of the life cycle.

c. Establishing policies and procedures for reporting system problems, requesting system enhancements and correcting deficiencies after System turnover.

d. Managing subsequent modifications, augmentations, and/or conversions and installations of non-Target System elements into the Target System environment.

e. Adapting and/or modifying BLM Operations and Maintenance concepts to fit the requirements of each site.

15.3 Ongoing Inreach Activities

Task Manager: M. Kirby SC-311

Ongoing inreach activities continue the process of preparing the end user community to accept and use the Target System. The objective of continuing inreach activities is to maintain effective communications between managers and users of the Target System. This will be achieved by providing continuing user support in the form of training, technical hotline support, publications development, and research and development to address special problems. The specific items required for this activity include:

a. User acceptance activities

b. Telephone support

c. Electronic mail/bulletin board

d. User acceptance preparation

e. Document identification, collection and management

f. Publications

SC-340 and SC-310 will manage and ensure that all functions and activities presented in the following subparagraphs are accomplished. SC-340 will also document updates or changes to the implementation planning process, especially when they impact user support or other tasks, according to the provisions of the Target System Document Management Plan.

15.4 Training Support

Task Manager: M. Kirby SC-311

The BLM will identify a responsible organization to plan, manage, and provide the required Target System Training Support during the operational phase of the life cycle. This organization will: define training support policies, procedures, and requirements; identify major training issues; and develop cost effective follow-on training methodologies.

15.5 Facilities Management

Task Manager: J. Webber WO-770

Follow-on Facilities Management Planning will be performed at each State Office, the Washington Office, and the Service Center. Each Target System site will require sufficient management and control to maintain routine operations, perform administrative duties, and ensure that the administrative support and technical needs of the site are met.

15.6 Technical Support

Task Manager: J. Strong SC-340

The Service Center will establish a Technical Support Center to support follow-on Target System operations and meet the long-term technical support needs of the user community.

The Target System Technical Support Center will provide as-required Bureauwide technical support, including Target System software maintenance and development. Provisions will be made for assessing current site and user requirements, and accommodating changes in required System performance, possibly through Target System platform upgrades.

The State Offices will provide basic technical support to sites under their jurisdiction and provide full technical support for customized, site-specific, and/or unique technical applications developed by that site. Technical problems beyond the current capabilities of the field offices will be referred to the Technical Support and Development Center for solution.

15.7 Contractor Maintenance Support

Task Manager: J. Strong SC-340

It will be the responsibility of the State Offices and the Service Center to determine the type(s) of maintenance support required for sites under their jurisdiction. Strategies and mechanisms for providing this support will be determined.

15.8 Communications Systems Management

Task Manager: J. Strong SC-340

The State Offices will manage their intra-state WAN and LANs and the Service Center will manage the interstate link and the SC LANs. The Service Center will be responsible for collecting and analyzing Bureauwide network statistics and make recommendations for future network requirements. The Service Center will manage the data communication Target System maintenance contract.

15.9 Mission Operations

Task Manager: J. Strong SC-340

Each sizeable Target System platform will require a knowledgeable staff to maintain and operate it. Routine tasks such as managing tape libraries, performing regular system back-ups, retrieving specific files from back-up tapes, overseeing the computer usage accounting functions, and managing the day-to-day use of consumables must be planned for as part of the O&M and ILS requirements for the operational phase of the life cycle.

The size of the staff required to operate the installed platform may be expected to vary with the characteristics of the installed computer system and site tolerance to system down-time. For example, a critical system at a State Office will require more maintenance specialists on-site to assure its availability than an auxiliary system at a Resource Area which may afford to wait for off-site help to arrive.

The effectiveness of the Target System operations staff will be highly dependent on the quality of training, technical, and communications management support. A significant shortfall in any of these areas may seriously impact the cost effectiveness of site operations.

Finally, in the fully operational Target System environment, the ability of a site to meet overall BLM mission objectives will depend on the availability and usefulness of the Target System. As a consequence, it is critical that all sites are prepared to function effectively in the Target System environment on a day-to-day basis.

Task Title: 15.1 Operations and Maintenance Analysis

April, 1990

Task Manager: L. Money SC-310

Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
15.1	Operations and Maintenance Analysis		SC-310, SC-340	TBD	TBD	Tech 6.3	Contractor Analysis Report	BLM Approval	

Task Title: 15.2 Operations and Maintenance Planning

April, 1990

Task Manager: J. Strong SC-340

Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
15.2	Operations and Maintenance Planning		SC-310, SC-340, States	TBD	TBD	O&M Analysis	O&M Plans for SC and all States	Approved Plans	

Task Title: 15.3 Ongoing and Inreach Activities

April, 1990

Task Manager: M. Kirby SC-311

Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
15.3	Ongoing Inreach Activities		SC-310, SC-340	TBD	TBD				

Task Title: 15.4 Training Support

Task Manager: M. Kirby SC-311

Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
15.4	Training Support		SC-310, SC-340, PTC	TBD	TBD	O&M Analysis			

Task Title: 15.5 Facilities Management

Task Manager: J. Strong SC-340

Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
15.5	Facilities Management		SC-310, SC-340, SOs	TBD	TBD	O&M Plans	Facilities Management Plans	Approved Plans	

Task Title: 15.6 Technical Support

April, 1990

Task Manager: J. Strong SC-340

Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
15.6	Technical Support		SC-310, SC-340	TBD	TBD				

Task Title: 15.7 Contractor Maintenance Support

April, 1990

Task Manager: J. Strong SC-340

Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
15.7	Contractor Maintenance Support		SC-340, SOs	TBD	TBD				

Task Title: 15.8 Communications Systems Management

Task Manager: J. Strong SC-340

Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
15.8	Communications Systems Management		SC-340, SOs	TBD	TBD	Technology Chapters 4 and 5	Target 15.2		

Task Title: 15.9 Mission Operations

April, 1990

Task Manager: J. Strong SC-340

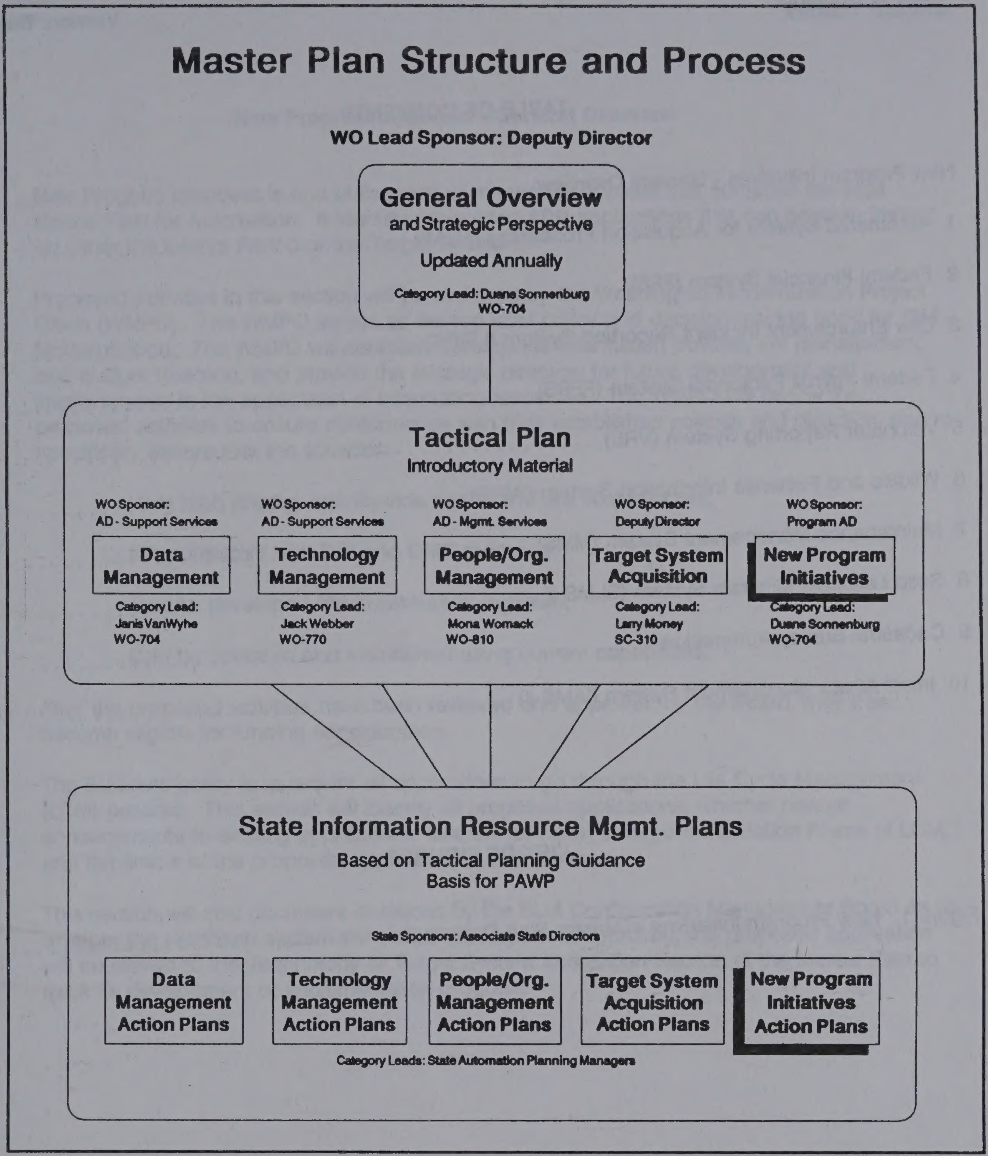
Step Order	Action Steps	Responsible Person	People Resources	Start	Finish	Dependencies	Deliverables	Completion Action	Remarks
15.9	Mission Operations		SC-340	TBD	TBD				

The Bureau of Land Management

Master Plan for Automation

New Program Initiatives

For Further Information,
contact the Assistant Director of Support Services
FTS 343-3897


Master Plan Structure and Process
WO Lead Sponsor: Deputy Director
General Overview
and Strategic Perspective
Updated Annually
Category Lead: Duane Sonnenburg
WO-704
Tactical Plan
Introductory Material
WO Sponsor:
AD - Support Services
Data Management
Category Lead:
Janis VanWyhe
WO-704
WO Sponsor:
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Technology Management
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WO Sponsor:
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Deputy Director
Target System Acquisition
Category Lead:
Larry Money
SC-310
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Program AD
New Program Initiatives
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State Information Resource Mgmt. Plans
Based on Tactical Planning Guidance
Basis for PAWP
State Sponsors: Associate State Directors
Data Management Action Plans
Technology Management Action Plans
People/Org. Management Action Plans
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Figure 1. New Program Initiatives in Master Plan Organization

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New Program Initiatives - General Overview

New Program Initiatives is one of five tactical management plans that comprise the BLM Master Plan for Automation. It identifies proposed ADP applications that can have an impact on either the Interim Period or the Target System.

Proposed activities in this section will be reviewed by the Washington Modernization Project Office (WMPO). The WMPO serves as the top level policy and decision-making body for IRM Modernization. The WMPO will establish Bureauwide information policies, set management and budget direction, and provide the strategic direction for future development and improvements in the application of information resources. The WMPO will review the proposed activities to ensure conformance with their established policies and direction, and to specifically ensure that the activities:

- Meet high priority, agencywide needs and are cost effective;

- Are consistent with DOI and OMB guidance;

- Can be developed within resources available;

- Can be operated and maintained using current capabilities.

After the proposed activities have been reviewed and approved by the Board, they then become eligible for funding consideration.

The Bureau's policy is to require all applications to go through the Life Cycle Management (LCM) process. This section will identify all proposed applications, whether new or enhancements to existing applications, that will (or have) entered the Initiation Phase of LCM, and the status of the proposed application is in this phase.

This section will also document decisions by the BLM Configuration Management Board as to whether the proposed system should be developed. If approved, the proposed application will be moved to the Technology or Target System Acquisition Section of the Master Plan to track its development or implementation progress.

1 Automated System for Acquisition Processing (ASAP)

The Automated System for Acquisition Processing (ASAP) automates all procurement functions, currently implemented manually, from creation of the requisition to closeout of the order or contract.

PLACE HOLDER FOR: ASAP

2 Federal Financial System (FFS)

BLM is developing interface and reporting programs for use with the Federal Financial System (FFS). FFS is a Department of Interior-wide system operating on the Bureau of Reclamation's hardware at the Administrative Service Center in Denver, Colorado.

PLACE HOLDER FOR: FFS

3 Law Enforcement Incident Reporting System (LEIRS)

The Law Enforcement Incident Reporting System (LEIRS) consists of conforming to and entering data into the FBI reporting system.

PLACE HOLDER FOR: LEIRS

4 Federal Payroll Personnel System (FPPS)

The Federal Payroll Personnel System (FPPS) consists of implementing the Federal Payroll Personnel System on the Bureau of Reclamation's system at the Administrative Service Center in Denver, Colorado.

PLACE HOLDER FOR: FPPS

5 Volunteer Reporting System (VRS)

The Volunteer Reporting System (VRS) consists of consolidated reporting of the volunteer program statistics.

PLACE HOLDER FOR: VRS

6 Wildlife and Fisheries Information System (WFIS)

The Wildlife and Fisheries System (WFIS) consists of several subsystems running on various patforms. These subsystems are presently being analyzed to determine the degree of further development and/or enhancement during the Interim time-frame.

PLACE HOLDER FOR: WFIS

7 Maintenance Management System (MMS)

The Maintenance Management System (MMS) task involves the continued development and implementation of the Facilities Maintenance Management System, including formulating a plan for inventory, facility maintenance, and site operation.

PLACE HOLDER FOR: MMS

8 Solid Leasable Minerals System (SLMS II)

The Solid Leasable Minerals System (SLMS II) provides information on solid minerals leases and will be used until the Target System version is implemented.

PLACE HOLDER FOR: SLMS II

9 Cadastral Survey Automation

This task involves the development of systems necessary to further automate measurement and management activities in the Cadastral Program.

PLACE HOLDER FOR: CADASTRAL SURVEY AUTOMATION

10 Initial Attack Management System (IAMS II)

The Initial Attack Management System (IAMS II) involves standardizing BLM IAMS hardware and software with IAMS used on an interagency basis for fire suppression activities.

PLACE HOLDER FOR: IAMS II

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